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ABSTRACT

This report focuses on prevention programs developed with support from the Office for Substance Abuse Prevention's (OSAP) High-Risk Youth Demonstration Grant Program. Included are an Introduction (Eric Goplerud and others) and the following reports: (1) "Athletes Coaching Teens for Substance Abuse Prevention: Alcohol and Other Drug Use and Risk Factors in Urban Middle School Students" (Albert Farrell and others); (2) "Adolescent Substance Prevention Education Network: A Rural-Based Pilot Program for Preventing Alcohol and Other Drug Use Among Pregnant Adolescents" (Tess Ford and Paul Sarvela); (3) "Lakeview Comprehensive Youth Services Project: Characteristics of Youth in High-Risk Environments" (William Southwick and Sharon Zahorodnyj); (4) "An Early Intervention Study of Delinquent Adolescents Using Alcohol and Other Drugs" (Arlene Utada); (5) "A Profile of High-Risk Young Women in the Girls Clubs of America's 'Friendly PeerSuasion' Project" (Dolores Wisdom); (6) "Adolescent Profile Form Developed for the Cumberland Day Treatment Program" (Gregory Coleman and Jack Sarmanian); (7) "'But Will It Play in Peoria?': The Problem of Technology Transfer in Alcohol and Other Drug Use Prevention Programs" (Steven Danish and others); (8) "Evaluation of Alcohol and Other Drug Use Prevention Programs With Mexican-American Youth" (Philip Hall and Martha Reyes); (9) Designing Evaluation Models to Assess Primary Prevention and Cultural Change: An Evaluation Report of the Leadership Project" (John Terry and others); (10) "Issues of Retention in Working With High-Risk Youth" (Candyce Berger and others); (11) "The Development of a University Early Intervention Program for Preventing Alcohol and Other Drug Use: The Challenge to Higher Education" (Roberta Blotner); (12) "Innovation and Bureaucracy at Odds: Consternation and Resolution" (Thomasina Borkman and others); (13) "Training Teachers To Integrate Prevention Concepts Into the Primary Curriculum" (Leah Koenig); (14) "Partnership in Prevention: Overcoming Barriers and Hurdles" (Sharon Weaver and Frances Young); (15) "Effects of Primary Prevention on Attitudes and Alcohol and Other Drug Use with At-Risk American-Indian Youth" (Joe Conner and Carol Nice Conner); (16) "Prevention and Early Intervention through Peer Support Retreats" (Peggy Glider and others; (17) "The Smart Leaders Booster Program: A Pennsylvania State University and Boys Clubs Prevention Project" (Tena St. Pierre and others); and (18) "Impact: An Early Intervention Demonstration Project" (Steven Ungerleider and Barry Caudill). (NB)

Office for Substance Abuse Prevention

# OSAP Monograph

Drug-Free Communities by the Year 2000

OSAP Prevention
Monograph-12

ED359461

# Working With Youth in High-Risk Environments: Experiences in Prevention

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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Alcohol, Drug Abuse, and Mental Health Administration

## OSAP Prevention Monograph—12

# WORKING WITH YOUTH IN HIGH-RISK ENVIRONMENTS: EXPERIENCES IN PREVENTION

**Editors:**
Carol E. Marcus, J.D.
John D. Swisher, Ph.D.

**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES**
**Public Health Service**
**Alcohol, Drug Abuse, and Mental Health Administration**

**Office for Substance Abuse Prevention**
**5600 Fishers Lane, Rockwall II**
**Rockville, MD 20857**

OSAP Prevention Monographs are prepared by the divisions of the Office for Substance Abuse Prevention (OSAP) and published by its Division of Communication Programs. The primary objective of this series is to facilitate the transfer of prevention and intervention technology between and among researchers, administrators, policymakers, educators, and providers in the public and private sectors. The content of state-of-the-art conferences, reviews of innovative or exemplary programming models, and reviews of evaluative studies are important elements of OSAP's information dissemination mission.

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**OSAP Prevention Monograph Series**
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# Foreword

The prevention of alcohol and other drug (AOD) use among the Nation's children and young adults is one of the country's top concerns, according to several national public opinion polls. Daily we are presented with statistics showing that a very large proportion of America's young people are using and becoming addicted to alcohol and other drugs. In 1987, the Office for Substance Abuse Prevention (OSAP) initiated a demonstration program to support pioneer efforts of community-based preventionists to develop effective programs related to youth in high-risk environments, their families, and their communities.

Prior research efforts provide few leads about effective strategies. It is extraordinarily difficult to develop programs, much less to conduct controlled research studies, for youth in high-risk environments. Much of the research that has been conducted has focused on very different drugs (mostly cigarettes, alcohol, and marijuana) and very different populations (primarily White, middle-class adolescents). Many of the youth who are at risk for becoming involved with alcohol and other drugs also are faced with problems of deteriorating communities, which are beset by high crime rates, inadequate schools, substandard housing, and poverty. Many of the youths at risk for AOD use are members of communities that have experienced high rates of persistent unemployment, cultural disintegration, and community disorganization. Others confront the geographic isolation of rural communities and reservations. Still others face bleak job opportunities in the "rust belt" and in communities dependent on farm industries.

The OSAP High-Risk Youth Demonstration Grant Program supports efforts to seek out youth in these communities and to develop innovative prevention programs to help these youths (and their families and communities) avoid AOD problems. This report focuses on some of the programs that have taken on the monumental challenges of not only helping youth to say "No" to drugs but also to say "Yes" to productive, valuable lives.

The report is divided into five sections. The Introduction provides mission and background information on OSAP's High-Risk Youth Demonstration Grant Program and lists risk and resiliency factors that guide the development of AOD use prevention demonstration grants. Chapters 1 through 4 report on 18 of the original grants awarded by OSAP in 1987. Each program is described in terms of challenges faced and lessons learned as preventionists developed and put into place programs for youth in high-risk environments.

Chapter 1, Characteristics of Youth in High-Risk Environments, presents studies by Utada, Southwick and Zahorodnyj, Wisdom, Ford and Sarvela, and a team of researchers from Virginia Commonwealth University that describe the characteristics of youth in high-risk environments. Populations studied include juvenile delinquents, athletes of low socioeconomic status, ethnic/racial populations of low socioeconomic status living in urban settings, and youth not living at home.

Chapter 2, Planning Models, offers insight into developing models for programs for youth in high-risk environments. The authors discuss the requirements for developing programs for this population and offer solutions to some of the problems they faced, including lack of data for specific populations, difficulty in adapting laboratory programs to high-risk settings, and lack of effective management techniques for establishing and maintaining records.

In chapter 3, Challenges and Solutions, the authors discuss problems they faced in implementing demonstration grant programs. These problems included lack of resources, resistance to training, difficulty in adhering to bureaucratic procedures in a dynamic situation, and a lack of clear priorities. Real-life solutions are described for many of the problems.

Chapter 4, Evaluation, reports on programs that have proven successful. Boys Club Smart Leader programs have delayed AOD use. Intensive retreat programs for populations at high risk have reduced AOD use among participants. AOD awareness training has raised the consciousness of and encouraged constructive action among teachers.

Through ideas and activities such as those described in this prevention monograph and especially through working together, I believe we can overcome some of the AOD problems that face our Nation's youth and thereby improve the future of this Nation.

*Elaine M. Johnson, Ph.D.*
*Director, Office for Substance Abuse Prevention*

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# Introduction

*Eric Goplerud, Bernard R. McColgan, and Steven Gardner*

In response to the alarming spread of alcohol and other drug (AOD) use among children and young people, the Anti-Drug Abuse Act of 1986 (P.L. 99-570) authorized new Federal initiatives to develop programs to prevent AOD use among youth in high-risk environments. Section 4005 of that statute established the Office for Substance Abuse Prevention (OSAP) in the Alcohol, Drug Abuse, and Mental Health Administration of the Public Health Service. The director of OSAP was authorized to support a demonstration grant program to "make grants to public and nonprofit private entities for projects to demonstrate effective models for the prevention, treatment, and rehabilitation of drug abuse and alcohol abuse among high-risk youth" (sec. 509A.(a)).

OSAP developed a demonstration grant program to fund innovative community-based primary and secondary prevention programs targeting youth in high-risk environments, their families, and their communities. OSAP identified six overarching goals for the grants program:

- decreasing the incidence and prevalence of AOD use among youth in high-risk environments;
- diminishing the risk factors for using AODs as they impact on individual high-risk youths, and on the environments in which these youths and their families function;
- increasing resiliency and protective factors in youth in high-risk environments, high-risk families, and communities to reduce the likelihood that youths will use AODs;
- coordinating and integrating the nonuse messages and activities of the many human service systems and other social influences affecting youth in high-risk environments into comprehensive, multilevel prevention communities;
- increasing the availability and accessibility of prevention, treatment, and rehabilitation services for these populations; and
- reducing the severity of impairment and promoting the rehabilitation of youths already using AODs.

In September 1987, OSAP awarded 130 demonstration grants for 1- to 3-year tests of innovative community-based prevention programs targeting youth in high-risk environments, their families, and their communities.* Nearly $24 million was awarded for the first year of the demonstration program. Awards were given to a very diverse group of applicants. Many of the youths served by grantees belong to ethnic and cultural groups in which the feasibility of prevention efforts has not been systematically investigated. The applicability of AOD-use prevention strategies showing promise among majority populations has not been tested on the very high-risk groups served by the 130 demonstration programs.

## Demonstration, Service, and Research

Sometimes there is confusion between demonstrations, which OSAP supports (the projects described in this prevention monograph), and service programs or research programs. OSAP programs fall in the first group only.

*Demonstration programs* are service delivery or service system collaboration programs that are grounded in state-of-the-art practices and relevant knowledge and theories in the prevention and treatment fields.

*Demonstration projects* seek to advance practice and knowledge by testing models in real-world settings, refining and revising these interventions in response to the experience of program staff in actually meeting the needs of clients and communities. Demonstrations are time limited (OSAP programs typically range from 3 to 5 years).

Evaluation is a critical mechanism for providing program managers and Government officials with information about the effectiveness of the programs being developed. Many of the issues discussed in this prevention monograph, dealing with developing and implementing new and innovative community-based programs are significant evaluation questions confronted during the first years of a new program. In later years, evaluation issues of effectiveness, innovation, and adaptation for program survival are likely to be more central. Because demonstrations are inherently exploratory, program managers must rely on evaluations; the typical mechanisms for monitoring the quality and quantity of services (e.g., quality assurance systems, per-unit costs, and cost-effectiveness) do not readily apply.

*Service programs* provide a known intervention, with known technologies and generally expectable outcomes from the intervention. OSAP does not fund service programs. Service programs attempt to make use of current knowledge for the welfare of clients but do not seek to advance knowledge. Typically, service programs are funded on an ongoing basis by State or local sources. Because a known technology is applied in service programs (e.g., individual psychotherapy, family counseling), service programs are typically supported on a unit-of-service basis. The quality of services is monitored through clinical supervision by persons trained and credentialed in the technology, and through quality assurance procedures.

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* For more information on these grants, refer to OSAP Technical Report 1, "Breaking New Ground For Youth at Risk: Program Summaries." To receive a free copy of this publication, order from OSAP's National Clearinghouse for Alcohol and Drug Information, P.O. Box 2345, Rockville, Maryland 20852.

*Research programs* test an intervention model that is firmly grounded in theory and prior research under well-controlled conditions. Presently, OSAP does not fund research programs. Research programs may test the replicability of the model, its relative effectiveness compared to other models, its components, its cost-effectiveness, and so forth. Many of the demonstration programs supported by OSAP may justify research programs if they show promising evaluation results during their demonstration phase.

## Risk and Resiliency Factors

A fundamental concept underlying the OSAP demonstration grant program is that some individual and environmental factors affect youths' likelihood of experimenting with and becoming dependent on AODs. Joy Dryfoos (1987) identified several factors that predict negative outcomes for youth. She examined four negative outcomes (i.e., AOD use, delinquency, school failure, and early childbearing) and found five common factors that are predictive of poor adolescent outcomes in all four areas:

- low grades, low academic achievement;
- lack of conformity, rebelliousness;
- heavy influence of peers;
- lack of parental support and guidance; and
- early initiation of one behavior associated with other negative behaviors.

### Multiple Causality of Drug Involvement

Although the five factors are associated with several negative outcomes, research that has specifically studied risks associated with AOD use in young people has found that the likelihood that a youth will abuse AODs increases as the number of risk factors that he or she is subjected to increases. The fewer the risk factors, the lower the likelihood that a youth will use AODs. Summarizing the results of an 8-year longitudinal study of adolescent AOD use, Newcomb and Bentler (1988, p.153) reported: "Drug use is not generated by a single factor, but rather results from a variety of different attitudinal, personality, family, social, and environmental forces."

Many factors place a child at risk for using AODs. Some of these are a function of the individual, and others a function of the individual's physical, cultural, social, political, and economic environment. It is the multiplicity of these risk factors that increases the probability of AOD use among youth. Youth in high-risk environments are those who experience multiple risk factors (Bry et al. 1982; Newcomb and Bentler 1988; Dryfoos 1987). Risk factors have been found at three levels: intrapersonal (within the individual), interpersonal (between individuals), and extrapersonal (within the environment). The following paragraphs list some of the most consistent factors that have been summarized by Kumpfer (NIDA 1987b), Hawkins and colleagues (NIDA 1987a), and Goodstadt (OSAP 1989), among others.

## Intrapersonal Factors

The range of intrapersonal variables is extensive. A nonexhaustive list includes the following:

- Genetic inheritance (especially family history of alcoholism or a family history of antisocial behavior, and especially where there are sons of fathers who had early onset of drinking patterns).
- Personality traits (e.g., low self-esteem, shyness, sensation seeking, inadequate social skills, lack of empathy for the feelings of others, easy and frequent lying, favoring immediate over delayed gratification, and insensitivity to punishment).
- Behavioral patterns (e.g., aggressiveness, school failure, dropping out, antisocial behavior, early use of AODs, criminal behavior, and sexual activity).
- Values, expectations, and beliefs (e.g., low religiosity, low academic and employment expectations, nonconformity, high expectation and value on independence, and tolerance of AOD use).
- Age (e.g., early initiation of drug use).
- Gender (e.g., being male).

## Interpersonal Factors

Some of the factors most consistently associated with AOD use are interpersonal relations, most commonly those between the youth and the family, peers, and school, and occasionally the church:

- ineffective parental control (e.g., lack of discipline, lack of supervision);
- lack of parental bonding;
- weak school bonding;
- low academic achievement;
- strong bonding to "negative" peers, AOD use by the best friend, choice of friends who use AODs, and greater orientation to peers than to adults;
- weak bonding to conventional peers; and
- lack of church attendance.

## Extrapersonal Factors

The list of extrapersonal variables that has received attention in previous research often is very strong and holds great promise for additional research:

- price, availability, and access to alcohol and other drugs (e.g., raising the price and otherwise limiting the access and availability to youth);
- parental behavior (e.g., parental modeling of AOD misuse, parental tolerance of AOD use by youth);
- family structure (e.g., disruptive family environment, teenage parents, single-female-headed household);
- peer behavior (e.g., peer modeling of AOD use, peer tolerance of AOD use, peer involvement in problem behavior);
- pro-use media influence on youth as well as the benefits of counter advertising;
- legal structures (e.g., minimum age for drinking, penalties for alcohol-impaired driving); and
- communities characterized by high levels of mobility (probable high levels of crime, delinquency, and AOD use).

## Resiliency

Not every child with multiple risk factors becomes an AOD user. Kumpfer (NIDA 1987b) estimated that between 12 percent and 25 percent of the children of alcoholics develop AOD problems. Thus, in one of the best understood risk categories, it is estimated that a minimum of 75 percent of the targeted population is resilient to AOD use. The causes of individual resilience in the high-risk categories are not well understood, although prevention programs have much to learn from the study of this phenomenon.

The literature on delinquency includes one striking analysis of resiliency among young people at multiple risk to delinquent involvement. Werner (1987) found the following environmental factors supportive of healthy, adaptive outcomes in children at risk for juvenile delinquency and other negative outcomes:

- four or fewer children in the family, spaced more than 2 years apart;
- much attention paid to the infant during its first year;
- positive parent-child relationship in early childhood;
- additional caretakers besides the mother;
- care by siblings and grandparents;
- some steady employment of the mother outside the household;
- availability of kin and neighbors for emotional support;
- structure and rules in the household;
- shared values—a sense of coherence;
- close peer friends;
- availability of counsel by teachers or ministers; and
- access to special services (health, education, social services).

Although resilient children suffer from constitutional deficits that predispose other children to delinquency and other negative outcomes, Werner found that resilient children tend to have fewer childhood illnesses and to recuperate more quickly than the vulnerable children. By temperament, the children are outgoing, warm, and autonomous. In school they show age-appropriate cognitive and social skills. The resilient children have access to natural, caring support systems in the nuclear family; when faced with instability in the immediate family, they find support in the extended family, among peers, or among trusted community members such as ministers or teachers.

## Targeting High-Risk Multiproblem Youth

The research on risk and resiliency factors is the foundation for OSAP's targeting of its AOD use prevention demonstration programs toward children with multiple risk factors who are in greatest need of intensive prevention interventions to reduce risk of long-term damage:

- children growing up in neighborhoods of concentrated poverty and social dislocation, high rates of crime and delinquency, and gangs, where schools have high dropout and failure rates;
- children growing up in distressed and disrupted families;
- children growing up with an alcoholic, drug-addicted, or mentally ill parent;
- children who have experienced abuse or neglect; and
- children whose experimentation with AODs puts them at high risk for severe negative consequences.

Although there is a growing body of information about the characteristics of youth in high-risk environments, families, and communities, there is much less known about effective preventive interventions with them. This prevention monograph begins to address the major gap between knowledge about risk and resiliency factors on the one hand, and ignorance about community-based prevention on the other. Through the efforts of the OSAP grantees, the prevention field will begin to answer some critical questions:

- Are there common characteristics of effective community-based prevention interventions that target youth in high-risk environments?
- Are there models or lessons that might be adapted by other community programs, especially programs working with cultural and ethnic/racial youth?
- What common barriers have been encountered by demonstration programs in implementing their services?
- What innovative solutions have been developed to overcome these problems?
- In what ways have programs targeting ethnic/racial, and cultural populations adapted their prevention strategies? What changes and innovations have taken place to accommodate the cultural and ethnic contexts of youth in high-risk environments and their families?
- What commonalities and unique practices have been tested to deal with high-risk youth at different developmental stages (or ages)?
- What prevention strategies have been developed to work with youths who have different risk characteristics, e.g., youths involved with the juvenile justice system, youths with AOD-abusing parents, or youths who are abused or neglected?

- What linkage and social change strategies have been developed to increase services available to youth in high-risk environments and to decrease the conditions contributing to youthful AOD use?
- What programs and practices are most promising for dissemination, multisite replication, or controlled research trials on the basis of evaluation findings?
- What gaps in prevention program design, implementation, or evaluation have been identified by evaluation studies that should be addressed by policymakers?

## Description of This Prevention Monograph

The OSAP Division of Demonstrations and Evaluation designed this prevention monograph to capture and share the experiences of the original grant programs in their first year of operation. All principal investigators and project directors were invited to submit article-length manuscripts describing the important challenges they faced, the lessons they learned, and the data they collected, as they planned, designed, and implemented their programs for youth in high-risk environments.

Representatives of eighteen programs participated in writing this prevention monograph, which is organized into the following major categories:

*Characteristics of Youth in High-Risk Environments.* Little is known about the background, habits, and related behaviors of youth at risk. This chapter provides new data and a new perspective on the complex needs of high-risk youth.

*Planning Models.* Several papers submitted provide insights on how to plan prevention services for youth in high-risk environments. The planning models presented range from the theoretical to the practical.

*Challenges and Solutions.* This chapter explores the problems encountered when initiating new programs, establishing new interagency relationships, and sorting through multiple levels of agency regulations and funding requirements.

*Evaluation.* Demonstration grants are not expected to produce results in the early phases, yet several of the programs have reported successful outcomes in reducing problem behaviors and AOD use.

Each chapter contains a wealth of ideas. Prevention professionals and others working with and interested in high-risk youth will find valuable, insightful, and practical information in this volume. This volume makes a substantial contribution to the literature on the emerging and critical area of prevention and intervention with youth in high-risk environments.

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# CHAPTER 1

# Characteristics of Youth in High-Risk Environments

## Introduction

This section provides an overview of the diversity of the youth being served by OSAP grantees and clearly illustrates the meaning of high-risk status. The congressional mandate emphasized that early users of alcohol and other drugs (AODs), juvenile delinquents, children of AOD abusers, pregnant teenagers, latchkey children (arriving home without an adult present), homeless children and teenagers, and school dropouts were at highest risk. Their characteristics are described in this chapter, which consists of five reports about youth from a variety of environments.

The target population of Arlene Utada's study, approximately one-third White and two-thirds African American, were delinquents with problems in relationships and in school. The majority of the study sample came from disrupted family backgrounds, approximately half of which have a female as the single head of household. These young people described their friends, with whom they spent most of their time, as AOD users.

A team of researchers from Virginia Commonwealth University worked with urban middle school students who were primarily from economically disadvantaged ethnic/racial groups. Their neighborhoods were characterized as areas of high drug use and related crime. These data were gathered as part of a demonstration program involving known athletes coaching youth in high-risk environments. One major conclusion based on their extensive data collection process was that these youth were clearly at risk for AOD use.

Southwick and Zahorodnyj compared young persons living at home with those who were homeless or had temporary living arrangements. The not-at-home youth were found to be significantly more at risk for alcohol, marijuana, cocaine, and inhalant use. The authors concluded that the demonstration program was definitely reaching the youth who were children of AOD abusers, victims of abuse, dropouts, delinquents, and/or economically disadvantaged.

Dolores Wisdom's Girls Clubs of America "Friendly PeerSuasion" population had the critical characteristics of ethnic/racial youth who live in urban settings with low socioeconomic status. Furthermore, many of these youth were latchkey children and children of AOD abusers. These characteristics were reflected in both the older girls ("PeerSuaders") and the younger ones ("PeerSuade-Me's"). The need for prevention and intervention services became readily apparent.

Ford and Sarvela focused on the problems of rural youth who have unique disadvantages as a result of their isolation and attendant transportation barriers. These professionals were reaching out to pregnant teenagers, only half of whom were in school. AOD use was found to be extensive among the girls, particularly in the last 3 months of pregnancy.

# Athletes Coaching Teens for Substance Abuse Prevention: Alcohol and Other Drug Use and Risk Factors in Urban Middle School Students

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## Program Description

Athletes Coaching Teens for Substance Abuse Prevention is a demonstration program targeted at middle school students in the Richmond City Public School District. These students are largely from ethnic/racial and economically disadvantaged families who live in neighborhoods where crime and drug use are high. The Richmond Community Services Board reported (*Youth Safety Task Force Report* 1986) that there are more than 6,500 arrests for abuse of alcohol and other drugs (AODs) in Richmond each year and more than 7,000 AOD abuse-related crimes. Of the approximately 20,000 crimes a year committed in Richmond, 13,500 involve AOD abuse. In 1982 the Youth Services Commission Office conducted a survey of 1,000 community adult and youth residents in the east end of Richmond (*Youth Safety Task Force Report* 1986). Both parents and children rated AOD use as the most serious problem they faced; 37 percent reported a need for AOD use services for youth in their neighborhood.

The Athletes Coaching Teens (ACT) program addressed the need for an AOD use prevention program in the Richmond community. ACT is a comprehensive program based on a goal-oriented, life-span developmental intervention developed by Danish and his colleagues (Danish and D'Augelli 1983; Danish et al. 1984). Although similar to the Life Skills Training program developed by Botvin (1983), it has several unique features. One is the use of high-profile professional and amateur athletes to serve as role models to young teens.

Professional, college, and high school athletes are involved in various stages of program implementation. Professional and college athletes address school assemblies and discuss excellence through goal setting and attainment, and the harms of drug involvement. The college athletes also assist in training selected high school athletes to be ACT leaders. Upon completion of the training program, the high school athletes carry out a seven-session intervention program during middle school health classes. During the ACT intervention, middle school students learn how to

- turn dreams into personal goals;

- develop a plan of action to attain goals;
- identify roadblocks that may prevent goal attainment, such as peer pressure and AOD use;
- use problem-solving skills to overcome roadblocks; and
- use techniques to increase their self-confidence.

At this writing, the ACT project was beginning its second year. During the first year of the project, a comprehensive battery of assessment instruments was developed and administered to more than 1,300 seventh-grade students at seven middle schools to obtain descriptive information on AOD use and risk factors in the target population, and to provide baseline data for measuring the success of intervention programs. This chapter describes the evaluation battery and provides descriptive data that support the need for prevention programs designed to serve this high-risk population.

## Data Collection Procedures

### *Development of the Evaluation Battery*

Instruments for the evaluation battery were selected to meet the following objectives:

- to describe the population being served by the ACT project,
- to determine whether participants acquired the knowledge and skills taught during the intervention,
- to evaluate the impact of the intervention on AOD use and other problem behaviors, and
- to evaluate the impact of the intervention on other variables predictive of AOD use.

The theoretical model that guided the selection of instruments was Jessor's Problem Behavior Theory (Jessor and Jessor 1977). One of the key assumptions of this model is that a variety of adolescent problem behaviors (including drinking, smoking, and other drug use) are interrelated, tend to covary, and share a common etiology. Problem Behavior Theory posits that problem behavior is a function of three major systems: the perceived environment, the personality system, and the behavior system. The utility of this model has been demonstrated in a number of studies that show that a substantial proportion of the variance in problem behaviors, including use of alcohol and marijuana, can be predicted by variables in these three systems (Jessor and Jessor 1977).

Measures of the three major systems were selected for inclusion in the evaluation battery. Key constructs in each system were first identified. For each construct established, instruments were identified that were appropriate for the target population and that met acceptable psychometric standards. In some instances, existing instruments were modified to make them more appropriate to the population under study. If established instruments could not be found, new instruments were developed. The final evaluation battery contained more than 300 items from more than 40 scales.

## *Description of Selected Instruments*

The following discussion focuses on selected instruments that are most descriptive of the risk factors associated with the target population.

*Demographic Variables.* Background data on students were obtained from the school system. These variables were as follows:

- students' age, sex, and ethnic background;
- living situation (e.g., with mother and father, with mother only);
- socioeconomic indicators including eligibility for low-rent housing, eligibility for free or reduced-price school lunch, mothers' and fathers' occupations, and mothers' and fathers' education level;
- information about any special education status; and
- information about any handicaps.

*Family and Peer Attitudes and Models.* Three measures were modeled after Jessor and Jessor's (1977) Drinking Questionnaire Social Support scales. The first measure assessed peer attitudes. Students were asked to rate how most of their friends felt about students their age drinking alcohol and using other drugs. The second measure assessed students' perceptions of the incidence and frequency of use for alcohol, marijuana, cocaine, and other drugs among (a) students at their school, (b) their friends, and (c) adults that they knew. Finally, students were asked to indicate how frequently friends offered them alcohol (including beer, wine, and distilled spirits) and other drugs, and how often they felt pressured by friends to drink alcohol and to use other drugs.

*The Adolescent Coping Orientation for Problem Experiences (ACOPE).* The ACOPE (Patterson and McCubbin 1987) is a 54-item instrument designed to identify the behaviors adolescents use to manage problems or difficult situations. Items include desirable and undesirable behaviors representing 12 different coping patterns. Nine ACOPE scales were included in the evaluation battery: Ventilating Feelings, Developing Self-Reliance, Developing Social Support, Solving Family Problems, Avoiding Problems, Seeking Spiritual

Support, Investing in Close Friends, Seeking Professional Support, and Engaging in Demanding Activity.

*The Emotional Tone Scale.* This is an 11-item scale taken from the Self-Image Questionnaire for Young Adults (Petersen et al. 1984). The Emotional Tone Scale was designed to measure negative (e.g., depression, loneliness, and anxiety) and positive (e.g., happiness and enjoyment of life) feelings of well-being.

*The Revised Rosenberg Self-Esteem Scale.* This six-item scale is a downward extension of Rosenberg's (1965) original measure of global self-esteem for older adolescents. The reliability and validity of this measure have been investigated in a large sample of public school students from grades 3 to 12. Reliability estimates of this scale were quite high. In terms of validity, the scale has been found to be significantly correlated with measures of anxiety and depression, grades in school, and indicators of school leadership, and with observations of self-esteem by parents, teachers, and friends (Simmons et al. 1973).

*Attitudes Toward Deviance.* On this 26-item list of delinquent or protodelinquent acts (Jessor and Jessor 1977), subjects are asked to rate how wrong they feel each item is on a 10-point scale. None of the items refers to AOD use. Scores on this measure have been found to correlate negatively with multiple problem behaviors including frequency of drunkenness and marijuana use (Jessor and Jessor 1977). A 20-item shortened version of this measure was included in the evaluation battery. The response format was shortened from a 10-point scale to a 3-point scale (1 = "not wrong," 2 = "a little wrong," and 3 = "very wrong") to facilitate its use with the population under study.

*Future Expectations Scale.* This is a 12-item scale based on items from the Monitoring the Future questionnaire of Johnston et al. (1984). Students were asked to answer yes or no if they ever thought they would do each of 12 items. Items included expectations about education (e.g., "graduate from high school," "go to college"), family (e.g., "get married," "be a parent"), and occupation (e.g., "join the armed forces," "get a full-time job").

*Behavioral Frequency Scale.* This is a 37-item scale developed for this study. The scale contains 13 items related to AOD use (e.g., "been drunk," "used marijuana") and 23 items assessing the frequency of other problem behaviors (e.g., "damaged school property on purpose," "had sexual intercourse"). The items were derived from Jessor and Jessor's (1977) Attitudes Toward Deviance scale, and Swisher's (1985) Primary Prevention Awareness, Attitude, and Usage Scale (PPAAUS). The Behavioral Frequency Scale also included a validity item from the PPAAUS, which asked students to indicate frequency of use for a fictitious drug called menotropins. Students were asked to indicate how often they did each item using the following scale: 1 = "never," 2 = "once, but not in the last year," 3 = "once or twice a year," 4 = "once or twice a month," 5 = "once or twice a week," and 6 = "at least once a day." These items were used to create an overall problem behavior scale and to provide descriptive information about the frequency of AOD use in the sample.

### *Description of Other Instruments Included in the Evaluation*

Also included in the evaluation were the following instruments related to perceived environment:

- *Rules Inventory* (Kandel and Lesser 1972). This inventory assesses degree of parental control (i.e., the extent to which the child's parents have specific rules for various types of things).
- *Perceived Environment Scales* (Jessor and Jessor 1977). This is a set of several scales measuring aspects of the proximal and distal structures of the child's perceived environment. Scales include Parental Supports, Parental Controls, Friends Supports, Friends Controls, Family Values, Parent-Friends Compatibility, and Parents-Friends Influence. The wording of items and response format were changed for use with the population under study.

The following instruments related to personality were also used:

- *Personal Values Questionnaire* (Jessor and Jessor 1977). The Value on Academic Achievement and Value on Independence scales were included. The wording of items and response format were changed for use with the population under study.
- *Expectations Questionnaire* (Jessor and Jessor 1977). This scale provided a measure of the student's expectations for achievement. The wording of items and response format were changed for the population under study.
- *Multidimensional Measure of Children's Perception of Control* (Connell 1985). A 24-item short form of this locus of control measure was used in the evaluation battery. This scale assesses four domains of control and three sources of control.
- *Anonymity* (Blythe et al. 1978). This four-item scale assesses a student's perception of the anonymity of his or her school environment.

Finally, these intervention-specific instruments were developed for this study:

- *Knowledge of Goal-Setting Skills.* This was a 10-item multiple choice measure of students' knowledge of the material covered in the ACT intervention.

- *Statement of Personal Goals.* This measure assessed students' goal-setting abilities by asking them to list two personal goals, which were then coded to determine how well students had followed the goal-setting procedures covered in the ACT intervention.

## Procedure

*Preintervention Battery.* The instruments for the evaluation battery were printed in a two-booklet format. Questionnaire booklets were precoded with student identification numbers and administered to seventh-graders at seven middle schools in the Richmond City Public School District during March 1988. Students completed the evaluation battery during health education classes on two consecutive days (except at one school, where both booklets were completed during an extended period). Project staff administered and collected the surveys. Students were assured that all responses would be confidential and that no information about individual students would be released to teachers, schools, parents, or anyone else. A fairly high absentee rate resulted in a high percentage of missing data (13 to 35 percent). Makeup days were scheduled to administer the evaluation battery to students who were absent on the original assessment days, reducing the rate of missing data to below 10 percent at all but one of the schools. The total sample size for preintervention batteries was 1,380. Data from 47 students were eliminated because of their responses to the validity item on the Behavioral Frequency Scale; that is, they reported using the fictitious drug. The resulting total sample size was 1,333.

*Postintervention Battery.* Selected instruments from the preintervention battery were incorporated into a one-booklet postintervention battery. Postintervention batteries were administered during May and June 1988, between 8 and 12 weeks after the preintervention battery and approximately 1 week after the intervention. The original plan was to administer the postintervention battery several months after intervention, but unforeseen delays in implementing the intervention, and the end of the school year, made this schedule impossible. The total sample size available for the postintervention battery was 1,196. Preintervention data were not available for 52 students; data from an additional 14 students were eliminated because of their response to the validity item. To provide a more accurate description of the population, postintervention data for 166 students who participated in the ACT intervention were also excluded. The final sample size for analyses of postintervention data was therefore 964.

## Characteristics of High-Risk Youth

### *Demographic and Background Data*

The study sample ranged in age from 11 to 17 (based on age at the end of the school year); 19.4 percent were older than the 12-to-13 age range expected for seventh-graders in this school district. Demographic data for the sample are summarized in table 1. The majority of students were African American (88 percent) and lived in families where the father was not present (60 percent). In terms of economic indicators, many of the students lived in low-rent housing; the majority were eligible for free or reduced-price school lunches. In terms of education, more than one-third of the fathers and mothers of the students had not finished high school and fewer than 10 percent of the fathers and mothers had college degrees.

**Table 1. Demographic and background data on the target population**

| Variable | Percent |
|---|---|
| Age (older than 13) | 19 |
| Sex (girls) | 50 |
| *Ethnic background* | |
| African American | 88 |
| White | 11 |
| Other (Hispanic, Asian/Pacific Islander, American Indian) | 1 |
| *Living situation* | |
| Living with both parents | 34 |
| Living with mother only | 60 |
| *Economic indicators* | |
| In low-rent housing | 20 |
| Eligible for free or reduced-price school lunch | 63 |
| *Mother's education level* | |
| Completed high school | 64 |
| Completed college | 9 |
| *Father's education level* | |
| Completed high school | 62 |
| Completed college | 10 |

## *Perceived Environment*

More than half of the students (55 percent) indicated that their friends "disapprove" or "strongly disapprove" of students their age drinking alcohol; 41 percent reported that their friends "don't really care"; and 4 percent reported that their friends "approve." Nearly two-thirds (66 percent) of the students reported that their friends "disapprove or strongly disapprove" of students their age using drugs; 30 percent reported that their friends "don't really care"; and 3 percent reported that their friends "approve." There were no differences between girls and boys in peer approval of these problem behaviors.

Students' estimates of the frequency of AOD use among students at their school, among their friends, and among adults that they know are summarized in table 2. Chi-square analyses were conducted to determine sex differences in their perceptions of the incidence of AOD use; these data are reported separately where significant differences were found.

Boys and girls had significantly different perceptions of the frequency of AOD use among students in their school; girls reported significantly higher incidence rates than did boys across seven of the eight items. The incidence of alcohol use by students at their school was estimated to be very high by both boys and girls. More than half the boys (53 percent) and girls (60 percent) estimated that half or more of the students in their school had tried alcohol; nearly a third estimated that half or more of the students at their school drank alcohol weekly. Students also perceived the incidence of other drug use among students at their school to be quite high. Marijuana was seen to be the most frequently used illicit drug. More than a third of the boys and nearly half the girls estimated that half or more of the students at their school had tried marijuana; about a fourth of the boys and girls estimated that half or more of the students at their school used marijuana weekly. Estimates of the frequency of use for cocaine and other drugs were somewhat lower (see table 2).

Boys and girls did not differ significantly in their perceptions of the incidence of AOD use among their friends. More than two-thirds (37 percent) reported that a few or more of their friends had tried alcohol, 37 percent reported that a few or more of their friends drank alcohol weekly, and 14 percent reported that at least a few of their friends had a drinking problem. Marijuana had the highest estimated use. More than half the students reported that at least a few of their friends had tried marijuana, and 29 percent reported that a few or more of their friends used marijuana weekly. Estimates of use were lower for cocaine and other drugs; 15 percent of the students reported that at least a few of their friends had a drug problem.

**Table 2. Students' perceptions of problem behavior frequency among students in their school, their friends, and adults that they know (percent reporting each category)**

| Variable | Percent | | | | |
|---|---|---|---|---|---|
| | None | A few | About half | More than half | All |
| | Among students in their school (males/females)* | | | | |
| Tried alcohol | 20/17 | 27/23 | 22/21 | 25/32 | 6/8 |
| Drink alcohol weekly | 39/31 | 33/34 | 19/22 | 9/12 | 2/1 |
| Tried marijuana | 34/24 | 29/27 | 17/18 | 17/25 | 3/5 |
| Use marijuana weekly | 49/38 | 29/33 | 14/16 | 6/12 | 1/2 |
| Tried cocaine | 54/42 | 31/35 | 8/14 | 6/9 | 1/1 |
| Use cocaine weekly | 65/51 | 25/34 | 5/9 | 4/5 | 1/1 |
| Tried other drugs | 46/36 | 28/31 | 11/17 | 12/13 | 3/3 |
| Use other drugs weekly | 54/44 | 28/35 | 9/12 | 7/8 | 2/1 |
| | Among their friends | | | | |
| Tried alcohol | 30 | 37 | 11 | 11 | 12 |
| Drink alcohol weekly | 63 | 23 | 8 | 4 | 3 |
| Have a drinking problem | 86 | 9 | 3 | 2 | 1 |
| Tried marijuana | 48 | 30 | 8 | 6 | 8 |
| Use marijuana weekly | 71 | 17 | 6 | 3 | 4 |
| Tried cocaine | 75 | 17 | 4 | 2 | 2 |
| Use cocaine weekly | 84 | 11 | 2 | 2 | 1 |
| Tried other drugs | 66 | 21 | 6 | 4 | 3 |
| Use other drugs weekly | 78 | 14 | 3 | 3 | 2 |
| Have a drug problem | 85 | 9 | 2 | 2 | 2 |

**Table 2 (continued)**

| Variable | Percent | | | | |
|---|---|---|---|---|---|
| | None | A few | About half | More than half | All |
| | Among adults they know (males/females)* | | | | |
| Drink alcohol weekly | 28/21 | 35/43 | 17/17 | 12/10 | 9/9 |
| Use marijuana | 49 | 29 | 10 | 7 | 5 |
| Use cocaine | 71 | 18 | 5 | 5 | 2 |
| Use other drugs | 70/62 | 17/21 | 5/8 | 4/6 | 4/3 |
| Have an alcohol problem | 63/53 | 22/28 | 6/8 | 6/7 | 2/4 |
| Have a drug problem | 78/70 | 13/16 | 3/6 | 4/5 | 2/3 |

NOTE: Sample size ranged from 1,285 to 1,311 because of missing item data.

*Results were reported separately for males and females when significant sex differences were found (based on chi-square (4) with $p < .05$).

Girls and boys differed significantly in their estimates of AOD use among adults they knew, and the number of adults they knew who had AOD problems. Marijuana was seen as the most frequently used drug. More than half the students reported that at least a few of the adults that they knew used marijuana. More than a third of the boys and nearly half the girls reported that at least a few of the adults they knew had an alcohol problem; and close to a fourth of the boys and girls reported that at least a few of the adults they knew had a drug problem.

No significant sex differences were found for the frequency with which boys and girls were offered AODs or felt pressured to use them. When asked how frequently they had been offered beer, wine, or distilled spirits by their friends, 52 percent of the students reported "never," 18 percent reported "once," 24 percent reported "a few times," and 6 percent reported "often." The corresponding figures for being offered other drugs were 74 percent ("never"), 11.5 percent ("once"), 11 percent ("a few times"), and 4 percent ("often"). In terms of pressure, 78 percent reported that they "never" felt pressured by their friends to drink, 9 percent felt pressured "once," 9 percent felt pressured "a few times," and 4 percent felt pressured "often." The corresponding figures for feeling pressured to use drugs were 84 percent ("never"), 6 percent ("once"), 6 percent ("a few times"), and 4 percent ("often").

## *Personality Measures*

Reliability coefficients (alpha coefficients) and means and standard deviations based on the preintervention administration of the evaluation battery are reported in table 3 for the personality measures described in the data collection section. Test-retest reliability coefficients are also reported for scales that were included in both the preintervention and the postintervention batteries.

Internal consistencies for the ACOPE scales ranged from .44 to .72 with a median value of .65. These values were somewhat lower than those found in the sample used to develop this scale (Patterson and McCubbin 1987). Test-retest reliability coefficients (Pearson correlations) were calculated for the four ACOPE scales that were administered at both testing occasions. These coefficients ranged in value from .42 to .58, suggesting that students showed moderate consistency in their responses on the coping questionnaire. Significant sex differences were found on three of the scales. Girls tended to rely more than boys on coping strategies related to developing social support, and less on seeking professional support and engaging in demanding activity.

The internal consistency of the Revised Rosenberg Self-Esteem Scale was fairly high. The internal consistency and test-retest reliability coefficients for the Emotional Tone Scale were both moderately high. Boys had significantly higher mean scores than girls on both of these measures.

The internal consistency of the Attitudes Toward Deviance scale was very high. Girls had significantly more negative attitudes toward problem behaviors than boys.

Data from the Future Expectations Scale are summarized in table 4. These data suggested that a very high percentage of students expected to graduate from high school, go to college, and graduate from college. The percentage of girls expecting to attend and graduate from college was slightly higher than the percentage of boys. A very high percentage of the sample also expected to have a full-time job; few expected to be on welfare (2 percent). A substantial percentage of the boys (41 percent) expected to join the armed forces. The majority of girls and boys expected to get married and be parents. Few expected to get in trouble with the law.

## *Frequency of Alcohol and Other Drug Use*

Data from individual items on the Behavioral Frequency Scale were used to construct table 5, which reports the frequency of AOD use in the sample. To simplify the presentation of these data, the six categories from the original scale were recoded into the following four categories: (a) "never used" (same as the original category); (b) "experimented" (includes the original categories

**Table 3. Reliabilities, means, and standard deviations on selected personality measures**

| Scale | Reliability | | Girls | | Boys | | *F*-test[‡] |
|---|---|---|---|---|---|---|---|
| | Alpha[*] | Test-retest[+] | Mean | SD | Mean | SD | |
| ACOPE | | | | | | | |
| Ventilating feelings | .72 | .52 | 14.1 | 4.7 | 13.6 | 4.4 | 3.3 |
| Developing self-reliance | .72 | .48 | 20.5 | 4.5 | 20.7 | 4.8 | 0.6 |
| Developing social support | .59 | — | 16.6 | 3.6 | 14.8 | 3.7 | 67.2 |
| Solving family problems | .63 | .59 | 10.9 | 3.7 | 11.3 | 3.8 | 3.4 |
| Avoiding problems | .67 | — | 3.8 | 1.7 | 4.0 | 1.9 | 3.0 |
| Seeking spiritual support | .62 | — | 8.3 | 2.9 | 8.1 | 2.8 | 1.8 |
| Investing in close friends | .55 | .41 | 7.3 | 2.0 | 7.3 | 2.1 | 0.1 |
| Seeking professional support | .44 | — | 3.7 | 1.7 | 3.9 | 1.8 | 5.9 |
| Engaging in demanding activity | .65 | — | 13.3 | 3.4 | 14.1 | 3.4 | 14.3 |
| Emotional Tone Scale | .76 | .63 | 3.5 | 0.7 | 3.7 | 0.6 | 50.6 |
| Rosenberg Self-Esteem Scale | .70 | — | 3.9 | 1.6 | 4.1 | 1.6 | 6.8 |
| Attitudes Toward Deviance | .97 | — | 49.6 | 12.2 | 45.7 | 14.2 | 28.2 |

NOTE: Sample size ranged from 1,261 to 1,284 because of missing item data; SD = standard deviation.

[*] Internal consistency coefficients for each measure.

[+] Pearson correlations between scores obtained approximately 2 months apart.

[‡] *F* (11,259) based on one-way ANOVA comparing mean scores for girls and boys.

**Table 4. Future expectations of students in the target population (percent reporting yes)**

| Event | Percent | | Chi-square |
|---|---|---|---|
| | Boys | Girls | |
| Graduate from high school | 97 | 98 | 1.92 |
| Go to technical school | 34 | 30 | 2.38 |
| Go to college | 84 | 91 | 14.03** |
| Graduate from college | 82 | 89 | 12.83** |
| Join the armed forces | 41 | 15 | 105.61** |
| Get a full-time job | 95 | 95 | 0.00 |
| Get welfare checks | 2 | 2 | 0.00 |
| Get married | 82 | 80 | 0.54 |
| Be a parent | 85 | 82 | 3.04 |
| Get in trouble with the law | 3 | 1 | 8.46* |

NOTE: Sample size ranged from 1,185 to 1,315 because of missing item data. Chi-square (1) used to test differences in percentages for boys and girls.

*$p < .05$.

**$p < .01$.

of "once, but not in the last year" and "once or twice a year"); (c) "regularly use" (same as the original category "once or twice a month"); and (d) "frequently use" (includes the original categories "once or twice a week" and "at least once a day"). The frequencies of students falling into each of the four categories were then calculated for the data collected at both the preintervention (time 1) and postintervention (time 2) time points (as previously mentioned, data on students who participated in the intervention groups were not included in these analyses). Significant sex differences were found on only one variable: boys reported a slightly higher frequency of smoking cigarettes than girls at time 1 only. Data for boys and girls were therefore combined for reporting.

The data in table 5 indicated that a substantial portion of the sample had used alcohol. At time 1, 35 percent of the sample reported drinking beer at least once (based on the combined percentages for "experimented," "regularly use," and "frequently use"); 23 percent reported drinking wine; 11 percent reported drinking liquor; and 16 percent reported being drunk, at least once. These figures showed a consistent increase at time 2, where the corresponding percentages were 53 percent (beer), 35 percent (wine), 17 percent (liquor), and 24 percent (being drunk). The percentages of students who reported using

**Table 5. Problem behavior frequencies* in the target population (percent)**

| | Never | | Experimented | | Regularly use | | Frequently use | |
|---|---|---|---|---|---|---|---|---|
| Problem behavior | T 1 | T 2 | T 1 | T 2 | T 1 | T 2 | T 1 | T 2 |
| Smoked cigarettes | 72 | 58 | 18 | 29 | 3 | 6 | 7 | 7 |
| Drank beer | 64 | 47 | 25 | 39 | 6 | 8 | 5 | 6 |
| Drank wine | 77 | 65 | 18 | 28 | 3 | 5 | 2 | 3 |
| Drank liquor | 89 | 83 | 8 | 13 | 1 | 2 | 2 | 3 |
| Been drunk | 85 | 76 | 10 | 17 | 4 | 4 | 2 | 3 |
| Used marijuana | 89 | 83 | 7 | 12 | 3 | 3 | 4 | 2 |
| Used other drugs+ | 89 | 89 | 8 | 9 | 2 | 1 | 1 | 1 |

NOTE: Sample size ranged from 849 to 878 because of missing item data. Testing occasions were separated by about 2 months; T = time.

*"Experimented" was defined as at least once, but no more than once or twice in the past year. "Regularly use" was defined as once or twice a month. "Frequently use" was defined as once or twice a week or more frequently.

+Based on highest reported frequency of use for inhalants, depressants, hallucinogens, stimulants, cocaine, narcotics, and other drugs.

alcohol at least once a month (i.e., combined percentages of "regularly use" and "frequently use") at time 1 were 11 percent, 5 percent, and 3 percent, for beer, wine, and liquor, respectively; and 6 percent reported being drunk at least once a month. At time 2 these percentages increased to 14 percent, 7 percent, and 4 percent for beer, wine, and liquor, respectively; and 7 percent reported being drunk at least once a month.

Among the different categories of illicit drugs, marijuana showed the highest frequency of use. At time 1, 11 percent of the sample reported that they had used marijuana at least once. This percentage increased to 17 percent at time 2. The percentage of students who reported using marijuana at least once a month was 4 percent at time 1, and 5 percent at time 2.

The percentages of students who reported use of inhalants, depressants, hallucinogens, stimulants, cocaine (including crack), and narcotics were all less than 5 percent. A single category of "other drugs" was therefore created to summarize the use of drugs other than marijuana (see table 5). The percentage of students who had tried one or more of these drugs at least once was 11 percent at time 1 and 10 percent at time 2. Use of one or more of these other drugs at least once a month was reported by 3 percent of the students at time 1 and 2 percent at time 2.

## Summary and Recommendations

ACT is an AOD use prevention program being implemented in the Richmond City Public School System. The students served by the program are predominantly ethnic/racial youth from single-parent-headed, economically disadvantaged families. Many of these youth live in neighborhoods where the rates of AOD use and crime are very high. Data collected as part of the evaluation of the ACT program suggested that these youth were at high risk for AOD use. This risk was seen most clearly in the findings related to youth perceptions of their environment. Whereas a majority of the study sample reported that their friends disapproved or strongly disapproved of students their age drinking alcohol or using other drugs, a fairly large percentage reported that their friends did not care and a small percentage reported that their friends approved of AOD use. Perceptions of the incidence of experimental and regular use of AODs among students at their school and among their friends were high for a fairly large percentage of the study population. In terms of direct pressure, more than 25 percent of the youth had been offered certain drugs and more than 15 percent had felt some pressure from their friends to use drugs. These figures were even higher for alcohol. This relationship between students' perceived environment and risk for AOD use has been well documented in other studies (Huba et al. 1979; Jessor and Jessor 1977; Kandel 1978; Newcomb et al. 1987).

Data on the frequency of AOD use in this population further supports the need for prevention programs. By the second testing date, more than half the students said they had tried beer and nearly a fourth had "been drunk." The percentages of students who had tried marijuana (17 percent) and other drugs (11 percent) also reflected significant increases. By the second testing, there were growing percentages of students who reported regular use and frequent use of alcohol and marijuana. It is difficult to compare these findings to comparable populations because of the lack of frequency data reported for this specific age group in an urban setting. Studies tend to aggregate frequency data on AOD use for youth under age 17 or across junior high grades (Dusenbury et al. 1986; Newcomb et al. 1987; Wetzel 1987). In the "Monitoring the Future" study, high school seniors reported the grade levels they were in when they began using various substances. For example, of the 1985 senior class respondents, 8 percent had smoked cigarettes, 33 percent had drunk alcohol, and 16 percent had used marijuana by the eighth grade (NIDA 1986). These frequencies, based on retrospective data from a national sample, appeared much lower than those found in the study sample. In contrast, junior high students in upstate New York reported frequencies of AOD use closer to those found in this study. Dusenbury et al. (1986) found that 37 percent of the students reported having smoked in the past year, 73 percent had had a few drinks, and 22 percent reported having smoked marijuana. This variability in reported use by early adolescents reflects the difficulty of generalizing AOD use across regions, ages, and settings.

The general trend for the incidence and frequency of AOD use to increase during a period of only 2 to 3 months was quite alarming. The reported increase in AOD use could be due to more honesty in reporting on the evaluation battery, seasonal variations in AOD use, or an actual increase in use over this short time period. It is hoped that the repeated assessments of this cohort of subjects, which were planned for the next 2 years, may shed some light on this issue. Given the fairly high rate of alcohol and marijuana use and its increase during the 2-month period studied, it appeared that intervention with this population was timely.

The findings also provide data that supported the rationale behind the use of the ACT intervention with this population. In spite of the economic disadvantages faced by many of the students, this was a very ambitious group. The overwhelming majority expected to complete high school, graduate from college, and obtain full-time jobs. Further support for the high aspirations of these youth was provided by another section of the evaluation battery, which asked them to list their goals. A high percentage of students' personal goals related to academics, including doing better in school, passing the seventh grade, finishing high school, and graduating from college. A number of students listed career goals, e.g., doctor, nurse, lawyer, and police officer.

The main focus of the ACT intervention was to teach youth the skills they need to work toward and attain such goals, and to show how AOD use can block these goals. The fact that these youth had already set high goals for themselves facilitated the first step of the intervention. An evaluation of the impact of the intervention was planned after followup data had been collected during the second year and a second (and larger) cohort of youth had participated in the ACT program.

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# Adolescent Substance Prevention Education Network: A Rural-Based Pilot Program for Preventing Alcohol and Other Drug Use Among Pregnant Adolescents

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## Introduction

Adolescent pregnancy presents a number of complications and adversities for the lives of young females as well as the general public. Policymakers realize the social and economic burden of this problem, which results in greater welfare dependency due to the limited education, diminished job opportunities, increased reliance on abortion, and increased health risks for adolescents and their infants (Foster 1986). The problems associated with adolescent pregnancy gain further magnitude when pregnant adolescents jeopardize their own health and that of their infants through alcohol and other drug (AOD) use.

It is well known that American youth are actively engaged in AOD use. Zabin and colleagues (1985) found that 53 percent of African American and White adolescent females had smoked cigarettes, 41 percent had used alcohol, 17 percent had smoked marijuana, and another 93 percent had used other street drugs. Lear et al. (1985) indicated that large numbers of young people suffered from serious, if not fatal, health and health-related problems, including unplanned pregnancies and AOD-related problems.

Although the majority of research studies concerning AOD problems among youth are based on urban populations, AOD use is not a problem confined to the cities. A number of studies (e.g., Napier et al. 1981; Sarvela and McClendon 1988) have found that AOD use has reached an alarming rate in rural regions. Preliminary studies of selected rural youth populations have shown that heavy drinking behavior among rural youth may possibly occur at higher rates than in urban regions (Sarvela and McClendon 1988). These data strongly suggest that rural adolescents are in need of comprehensive community-based prevention services concerning AOD use.

This document describes a study of AOD use and related behavioral problems of participants enrolled in the Adolescent Substance Prevention Education Network (ASPEN), a program designed to reduce AOD problems among pregnant teens in rural southern Illinois.

## Program Description

### *Shawnee / Adolescent Health Center*

The Shawnee/Adolescent Health Center (SAHC), which is directing the ASPEN program, is a rural health clinic specializing in services for young persons aged 10 to 20 in extreme southern Illinois. Established in 1979 to provide comprehensive medical, counseling, health education, and social services for adolescents, the center has continued to maintain and grow with stable and innovative programs. Services are targeted primarily for rural Jackson, Franklin, and Williamson counties located in southern Illinois. The center is the only medical facility in the region exclusively providing adolescent health services.

Staff of the SAHC health-care facility include four obstetrician-gynecologists, two family practitioners, a pediatrician, a nurse practitioner, three nurses, and two health educators. The SAHC also coordinates the Shawnee Network for Adolescent Pregnancy and Parenting (SNAPP), which provides a range of services for pregnant and parenting adolescents: parenting education, parent support groups, home visitor parenting support, volunteer advocates, prenatal classes, and necessary transportation. The State-funded Women, Infants, Children (WIC) Program is available on site for pregnant and parenting adolescents. Well-infant care is provided for children born to adolescents in the SNAPP program.

Pregnancy prevention services are provided through specialized programs for adolescents, both male and female, on site and through community programs. Examination and treatment for sexually transmitted diseases, family planning, and pregnancy testing are important aspects of the program, as well as general medical, school, and sport physical examinations.

## The ASPEN Program

ASPEN, through Rural Health, Inc., and Community Health and Emergency Services, has extended AOD use prevention services to adolescent prenatal patients over a 10-county area. SAHC will offer the ASPEN program at three community health center pilot sites when the curriculum manual and evaluation phase is completed.

### *Goals*

The major goals of the ASPEN program are as follows:

1. to prevent or reduce AOD use by prenatal ASPEN program participants,

2. to increase prenatal participant awareness and knowledge of wellness concepts and healthy life choices,
3. to increase prenatal participant awareness and knowledge concerning AOD use and effects,
4. to provide for more comprehensive community networking to enhance use of resources and referral systems,
5. to provide (through training) strengthened reinforcements and supports for prenatal participants to adopt more healthy lifestyles, and
6. to increase prenatal participant awareness of educational resources and encourage a return to educational pursuits.

## *Curriculum Development*

The ASPEN curriculum includes the following eight modules covering topics identified through a modified Delphi needs assessment procedure:

1. general alcohol and other drug information,
2. fetal development,
3. decisionmaking and self-esteem,
4. alcohol,
5. health and nutrition,
6. prescription and nonprescription drugs,
7. smoking,
8. marijuana, and
9. stress.

As indicated by Bell (1980), a variety of media should be used to present information in an interesting, compelling manner appropriate to the target age group. Several varied techniques were used to design and develop the ASPEN modules: visual information presented on colorful pages, a learning activity for each module concerning the content, and cartoon illustrations with characters that develop throughout to demonstrate health decisions in each module. Cartoon characters range in age from an adolescent prenatal patient to a prenatal patient in her late twenties.

As stated by McNeil (1981), when curriculum goals are technical or vocational, skills should be emphasized in the curriculum materials. When curriculum goals emphasize moral and ethical domains as the integrative function, values are the preferred element for organization. The ASPEN curriculum incorporates aspects of skill building, processes, and resultant decisions, which include participants' explorations of their own values. After each module is completed (during eight regular patient visits to the clinic), the prevention specialist or nurse discusses the information and activity and any questions the patient may have. This life skills training approach has been suggested by NIDA (1987) as an effective strategy for preventing AOD use.

The curriculum ranges between the fifth- and eighth-grade reading levels. Efforts were made to keep readability levels low, but essential technical terms necessitated increases in reading level in some modules. (ASPEN program staff are available to help program participants understand words that are above their reading level.)

As the curriculum was being developed, all staff involved in the ASPEN curriculum administration were receiving training in methods of administering and teaching the curriculum. To pilot test the materials, curriculum administration staff were trained at one site. Necessary alterations in the curriculum or procedures were to be made through oral and written feedback before implementing the program in other sites. To ensure adequate implementation of the program, an ASPEN curriculum manual was to be developed for program staff, including methods of administering and teaching the curriculum.

### *Program Implementation Procedures*

Each prenatal patient attending an initial pregnancy workup with the nurse was to receive introductory information about the ASPEN program. This information would focus on pregnancy and clinic visits and encourage the patients to ask questions. At each succeeding clinic visit, the prenatal patient would be provided an ASPEN module to read and complete in the waiting room. Each module would consist of one page of specific information, cartoons to illustrate highlighted points, and an activity on the back that required the patient to process and apply the information.

The ASPEN curriculum, once completed and evaluated for effectiveness, would be made available for distribution and use in other obstetrical clinic settings. Because the three pilot community health centers operate differently, it was thought possible to explore using ASPEN in settings other than a traditional clinic setting, such as in outreach to schools.

## Pilot Data

### *Methods*

*Sample.* The sample for the pilot study comprised the 18 pregnant adolescents enrolled in the ASPEN program at one site in the 1988 program year. Approximately two-thirds of the sample was White (67 percent), with an average age of about 15.5 years (ranging from ages 14 to 18). A majority (83 percent) lived in small towns with populations no larger than 10,000, and 56 percent reported that they were currently attending school.

*Instrumentation.* A self-administered questionnaire was used as the data collection instrument for this study. The questionnaire covered topics such as demographics; peer, personal, and parental AOD use; and general health-related topics such as emotional, physical, and sexual abuse. Although the instrument was designed to be self-administered, ASPEN program staff were present to help participants fill it out if necessary.

*Research Design and Data Collection Procedures.* A general cross-sectional survey design was used. Program evaluation forms were completed during the initial interview process at the clinic. Program staff explained the purpose and need for the study to the participants. Participants read or were read a letter explaining the purpose of the pilot study and were asked to indicate by signature their willingness to participate in it. They were then orally instructed by program staff on how to complete the survey form. The instruction included discussing procedures that would occur during the initial clinic visit. Participants were told that blood and urine samples would be collected. Although these samples are not currently used for AOD screening, the participants were not told that a drug screen would not occur.

Patient-participants were provided a quiet, confidential area in which to complete the form, and a program staff person periodically checked for any questions or problems. The staff person reviewed the participant's questionnaire for completeness; if AOD use was indicated, the staff person discussed and evaluated the findings with the participant. All program staff administering the survey were trained in the proper methods of administering the survey and conducting the postsurvey interview.

### *Results*

*Patterns of AOD Use.* Table 6 shows the general patterns of AOD use among the ASPEN pilot study sample. Caffeine, in the form of soft drinks, tea, chocolate, and coffee, appeared to be the substance most frequently used by the sample population. Caffeine was followed by aspirin, cold medicines, and acetaminophen. Cigarette use was quite high, with 33 percent indicating that

**Table 6. Alcohol and other drug use patterns of the study sample**

| | Percent | | |
|---|---|---|---|
| | Have ever used | Used past 3 months | Use now |
| Caffeine | 95 | 78 | 67 |
| Aspirin | 73 | 23 | 6 |
| Cold or cough medicines | 67 | 6 | 0 |
| Acetaminophen | 62 | 45 | 6 |
| Cigarettes | 50 | 44 | 33 |
| Acne medicines | 45 | 38 | 17 |
| Marijuana | 17 | 6 | 0 |
| Antacids | 17 | 11 | 0 |
| Allergy medicines | 17 | 11 | 0 |
| Alcohol | 11 | 6 | 0 |
| Narcotics or pain medicines | 11 | 6 | 0 |
| Laxatives | 11 | 6 | 0 |
| Birth control pills | 11 | 0 | 0 |
| Downers or sleeping pills | 6 | 0 | 0 |
| Diet pills or "speed" | 6 | 0 | 0 |
| Morning sickness medicines | 6 | 6 | 0 |
| Cocaine or crack | 0 | 0 | 0 |
| Valium or nerve medicines | 0 | 0 | 0 |
| LSD or hallucinogens | 0 | 0 | 0 |
| PCP | 0 | 0 | 0 |
| Antiseizure medicines | 0 | 0 | 0 |

they were still smoking cigarettes and another 11 percent having smoked in the past 3 months. Only 6 percent reported having used alcohol in the past 3 months, with no one indicating they currently used the drug. No subjects reported use of cocaine, LSD, PCP, or similar drugs.

*Parent and Peer AOD Use.* An extremely high rate of parental cigarette use was found, with 95 percent of program participants indicating that their mother, father, or both smoked. A large percentage indicated that their parents used alcohol (73 percent), and 34 percent reported parental use of stimulants such as cocaine, diet pills, and "speed." Almost one in four program participants had a parent who smoked marijuana (23 percent); 12 percent reported use of sleeping pills and 6 percent narcotics. Subjects indicated that their peers were active AOD users with cigarettes most frequently used (67 percent), followed by alcohol (56 percent) and marijuana (28 percent). Only a small number had friends who used narcotics, and no one reported that they had friends who used stimulants such as "speed," cocaine, or crack. These data are shown in table 7.

**Table 7. Perceptions of the study sample about the alcohol and other drug use patterns of their parents and peers**

| | Percent | | | |
|---|---|---|---|---|
| | Father | Mother | Both parents | Peers |
| Cigarettes | 17 | 28 | 50 | 67 |
| Alcohol | 0 | 56 | 17 | 56 |
| Cocaine, diet pills, "speed" | 28 | 6 | 0 | 0 |
| Marijuana | 6 | 17 | 0 | 28 |
| Sleeping pills | 6 | 0 | 6 | 12 |
| Narcotics | 0 | 6 | 0 | 6 |

*Perceptions of AOD Effects in Pregnancy.* Table 8 presents data concerning student perceptions about which drugs may cause problems during pregnancy. A large majority (89 percent) felt that alcohol and cigarette use could cause complications during pregnancy, and another 61 percent indicated that

**Table 8. Perceptions of the study sample about effects of alcohol and certain other drugs in pregnancy**

| Substance | Percent who believe it causes problems |
|---|---|
| Alcohol | 89 |
| Cigarettes | 89 |
| Aspirin-type medications | 61 |
| Birth control pills | 50 |
| Analgesic medications | 50 |
| Antacids | 39 |

aspirin was problematic. A large number also indicated that birth control pills, analgesic medications, and antacids could cause problems during pregnancy.

*Sources of AOD Information.* Friends were cited most frequently as a source of AOD information (72 percent), followed by parents and the school (each at 67 percent). Television was reported as an information source by 56 percent of participants, and the doctor by 39 percent. Thirty-nine percent cited the SAHC as an information source, even though the ASPEN program was still only in its pilot stage. See table 9 for data concerning sources of AOD information.

**Table 9. The study sample's sources of information about alcohol and other drugs**

| Source | Percent indicating information source |
|---|---|
| Friends | 72 |
| Parents | 67 |
| School | 67 |
| Television | 56 |
| Doctor | 39 |
| This health center | 39 |
| Radio | 17 |
| Church | 17 |

*Problem Behaviors.* Forty-four percent of program participants reported having been suspended from school for fighting, and 17 percent reported having been abused physically, emotionally, or sexually. Another 11 percent had been arrested or in trouble with the law. A positive finding was that none reported having attempted suicide. See table 10 for study findings of problem behavior.

## Summary

Probably the most important pilot study finding was the high rate of cigarette use among ASPEN program participants. For example, one in three participants were continuing to smoke cigarettes, with 11 percent reporting that they had used cigarettes in the past 3 months. According to Pinney (Office of Smoking and Health 1980), there is an association between the amount of smoking during pregnancy and the frequency of spontaneous abortions. He

**Table 10. Problem behaviors of the study sample**

| Problem behavior | Percent indicating problem |
|---|---|
| Suspended from school for fighting | 44 |
| Abused (emotionally, physically, or sexually) | 17 |
| Arrested or in trouble with law | 11 |
| Tried suicide | 0 |
| Received mental health treatment | 0 |

reported that cigarette smoking is responsible for as many as 14 percent of preterm deliveries in the United States and significantly increases premature placental detachment, vaginal bleeding, abnormal placental implantation, and ruptured membranes. Light-smoking mothers increase the risk of bearing a low birth-weight child by 53 percent, and the low birth-weight risk is increased to 130 percent for women who smoke a pack or more a day. Maternal smoking is also associated with delayed physical growth, impaired intellectual ability, poor school performance, and behavioral problems (Office of Smoking and Health 1980).

Caffeine products were also consumed by the study participants at extremely high rates. Although no mutagenic or teratogenic effects have been attributed directly to the consumption of caffeine in humans, Krupka (1981) indicated that high caffeine intake (about 600 milligrams per day, with cola beverages averaging from about 32 to 62 milligrams per serving and a cup of brewed coffee at 153 milligrams) is associated with a greater incidence of fetal loss. From one study only 1 out of 16 women with a high intake of caffeine was found to have an uncomplicated delivery; the other 15 pregnancies ended in spontaneous abortion, stillbirth, or premature birth.

Reported use of alcohol was light. However, it is possible that social desirability bias may be present in these responses. Marijuana smoking, which can produce similar effects to that of cigarette smoking, was reported to be used in the past 3 months by 11 percent of the subjects. Other drug use was not reported by any of the subjects. The AOD use data suggested that continued emphasis on cigarette smoking was warranted, since such a high percentage of the ASPEN participants were continuing to smoke.

Parental AOD use patterns are often linked to youth drinking patterns. For example, Newcomb and Sarvela (1988) found that parental patterns of alcohol use were strongly related to alcohol drinking patterns in rural Ohio youth. It is therefore important for program implementors to attempt to assess the degree of parental AOD involvement when designing and implementing an

AOD prevention program. Parental AOD use patterns are particularly relevant with regard to smoking, because recent research has clearly demonstrated that secondary or sidestream smoke can be damaging to the nonsmoker's respiratory system. In addition, problems related to emotional, physical, and sexual abuse, which are so often associated with alcoholism, further reinforce the notion that a discussion of parental AOD use behaviors is an important component of an AOD education program.

Peer pressure and peer AOD use have also been shown to be an important predictor of AOD use in youth. For example, the study of rural junior high school youth in northern Michigan and northeastern Wisconsin by Sarvela and McClendon (1988) found that peer AOD use rates were strongly correlated with personal AOD use behaviors. The ASPEN study data also indicated that a high percentage of the ASPEN program participants' friends were engaged in AOD use. These findings strongly suggested that a peer pressure component (perhaps emphasizing AOD use refusal skills) should be added to the ASPEN curriculum package.

Study data suggested that program participants were aware of the problems of smoking, drinking, and using other drugs during pregnancy. These were positive findings, especially in view of the fact that 39 percent of the respondents indicated that they had heard about the problems related to AOD use and pregnancy at the SAHC, and 22 percent said that information they received from the SAHC helped them reduce or quit using AODs. These extremely positive pilot study data strongly support the implementation of similar programs in adolescent health clinic settings.

Concerning AOD information sources, Sarvela et al. (1988) also found that friends were frequently cited as a source of AOD information. A similar finding was made in the ASPEN study, with 72 percent of ASPEN program participants citing friends as sources of AOD information. Schools and parents also figured prominently as sources of information. These data reinforce the need for comprehensive school health education programs. In addition, the schools and local community agencies may want to provide education programs for parents as well, because parents were frequently cited as an information source by ASPEN participants.

With regard to formative evaluation of the program, 39 percent of ASPEN program participants indicated that they had heard about problems related to AOD use and pregnancy from the SAHC. Further, 22 percent reported that information provided by the SAHC affected their choice to cut down or quit using AODs. These pilot study results were encouraging. It was hypothesized that, with the program fully implemented, these rates would climb even higher.

In conclusion, this pilot study has provided ASPEN program developers with additional information to be considered during the continued development and refinement of the ASPEN curriculum materials. Data concerning peer and parental AOD use reinforced the idea that topics covering these aspects of AOD use must be included in the curriculum. In addition, smoking behaviors would have to be addressed, because a high percentage of the subjects were continuing to smoke while pregnant.

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# Lakeview Comprehensive Youth Services Project: Characteristics of Youth in High-Risk Environments

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## Introduction

The community of Lakeview on the north side of Chicago has become a gathering place for high-risk youth. The area is filled with clubs and shops that cater to the young, and it draws young people from across the Chicago metropolitan area and the Midwest. Teenage prostitution, alcohol and other drug (AOD) use, and other forms of exploitation are epidemic in this area.

Before the Lakeview Substance Abuse Prevention Project (LSAPP), there were no adolescent AOD prevention or treatment services available in the area. There was, however, a group of community-based, youth-serving agencies that had established contacts with various youth subcultures in the area. The goal of LSAPP is to build on the existing capabilities of these agencies by enhancing their capacities to provide AOD use prevention and treatment services to youth in high-risk environments.

Project data indicate that a significant number of youth who are being reached by the project are living not at home but in foster placement, in temporary foster homes, in temporary living arrangements, with relatives, with a friend, or undomiciled. Also, a review of the high-risk indicator data illustrates that a substantial number of LSAPP youth are "throw-away," runaway, or homeless.

This section describes and analyzes the characteristics of high-risk youth who live at home compared with youth who do not live at home. The project will analyze the characteristics of throwaway, runaway, and homeless youth as additional data become available.

## Program Description

LSAPP is a community-based network of seven local agencies that are cooperating to prevent AOD and to provide linkages to treatment services. Each of the participating agencies, through a variety of strategies, reaches out to youth in high-risk environments who are part of the "street life" in the Lakeview community. Individually, the agencies focus on specific problems such as homelessness, runaways, teenage prostitution, sexual identity conflict, and exploitation. Each participating agency in LSAPP is extending its services to provide AOD prevention and treatment service linkages for youth.

These linkages are provided by staff members who have training and expertise in adolescent AOD use. Contact is established with youth in high-risk environments by using aggressive outreach methods. Once contact is established, AOD use prevention information is provided. In addition, intervention groups are established, which provide more formal supportive interactions between clients and staff. The intervention groups also allow counselors to make appropriate referrals for intensive outpatient, residential, or inpatient services, which are available outside the immediate community.

The LSAPP participating agencies are described in the following paragraphs.

*Youth Outreach Services (YOS),* the lead agency, is the largest outpatient treatment program in the State of Illinois specifically focused on adolescent services. YOS currently provides outpatient and intensive outpatient services to 1,000 clients each year. In addition, the agency provides outreach services in 11 public high schools and social and recreational activities for hundreds of youth each year. LSAPP was jointly developed and proposed by YOS and the Illinois Department of Alcoholism and Substance Abuse. Administrative support and direction for all agencies in LSAPP is provided by YOS. The agency is licensed by the Illinois Department of Alcoholism and Substance Abuse for AOD use prevention services and by the Illinois Department of Children and Family Services as a child welfare agency. YOS has been in existence since 1959 and is a major resource for youth.

*Neon Street Center for Youth* is part of the Travelers and Immigrants Aid organization in Chicago that serves people in transition: travelers in distress, newly arrived immigrants and refugees, runaway and throwaway youth, victims of domestic violence, and the homeless. Neon Street Center is the only drop-in center for homeless youth in Chicago. It provides comprehensive services for homeless youth, homeless pregnant teens, and homeless teen parents with both a drop-in center and a shelter for youths under 21 years old. Also, the center has developed AOD use prevention presentations by youth for youth and has been in operation for 2 years. As part of LSAPP, Neon Street Center provides an expressive multimedia art program on AOD use prevention to homeless, runaway, and throwaway youth.

*The Northside Ecumenical Night Ministry (NENM)* is an 11-year-old organization established to provide a visible and available presence of helping persons in the street community on Chicago's North Side. The organization operates primarily in the evening and late night hours. NENM workers search out locations on the North Side where numbers of marginal persons congregate and frequent game parlors, fast food places, bars, and street corners. The outreach workers establish a trusted presence in the area and present themselves as available to help or provide linkages to resources for those needing assistance. As part of LSAPP, NENM provides contact and referral services to youth in high-risk environments who are using AODs.

*Transitional Living Programs (TLP)* is a private, not-for-profit child welfare agency that serves abused and neglected children between the ages of 16 and 20 and runaway, homeless, and exploited youth of all ages. The agency was founded in 1977 to provide a supervised, independent living program for youth in the child welfare system. In 1981, services were expanded to provide housing and protective services to runaway and homeless youth. The services include emergency shelter, 24-hour crisis intervention, transportation, family and individual counseling, advocacy, and referral services. Recently TLP has begun to develop services for youth on the street who are involved in commercial prostitution and pornography. Their program, called Street Choices Offered to Rehabilitate the Exploited (SCORE) is the first program of its type in the State. As part of LSAPP, TLP provides outreach and referral services to youth in high-risk environments who are AOD users.

*Horizons Community Services (HCS)* has, since 1973, identified the needs of the gay and lesbian community in Chicago and established and conducted programs responsive to their needs. As the only agency of its kind in Chicago, HCS is a critical resource for the gay and lesbian community. Gay and lesbian youth are coming in increasingly greater numbers to the Lakeview community, which is known for its diverse population and acceptance of varied lifestyles. In response to this reality HCS has developed for gay and lesbian youth a drop-in activity, socialization, and support program. This program provides guidance, positive role models, and constructive socialization for youth who have left home prematurely because of conflict related to sexual orientation. As part of LSAPP, HCS provides an AOD use prevention program using group presentation and activities for school-age children.

*Gateway Foundation* is a private, not-for-profit agency that provides outpatient and residential services for AOD abusers. In addition, the agency provides AOD use prevention and community education programs to children aged 8 to 14. As the oldest and largest provider of residential AOD prevention services in the state, Gateway represents a major resource for AOD treatment. Of its three outpatient programs locations around the State, one is on Broadway, the main street in the Lakeview community. The agency's services include outpatient and intensive outpatient counseling services for adults, remedial education for persons convicted of driving under the influence of alcohol, community education, and prevention and education programs that are delivered in schools and to community groups. As part of LSAPP, Gateway provides an AOD use prevention program using group presentations and activities for school-age children.

*The Counseling Center of Lakeview (CCLV)* is the primary provider of mental health services in the community. The current range of services includes outpatient mental health programs for the Hispanic population, children and adolescents, the elderly, and psychiatric aftercare clients; and intensive case management for the long-term mentally ill. Outreach and advocacy are used in conjunction with both in-office and in-home counseling. As part of LSAPP, CCLV provides assessment, outpatient counseling, referral, and linkage services for youth with AOD problems and for their families. CCLV is a licensed provider of outpatient AOD treatment services. The program has been in existence since 1975 and has an established capability in working with individuals dually diagnosed with AOD problems and mental illness.

## Data Collection

Data are collected on LSAPP youth by staff of the participating agencies and the project evaluator. A committee comprising the executive directors of the participating agencies worked with the lead agency staff to develop a data set and design the data collection instruments. Agency staff collect demographic, drug history, and high-risk indicator data on new clients.

Information on service utilization is collected by agency staff and submitted weekly to the lead agency, where data are entered into a computer, maintained, and used for data analysis and management reports.

## Methods

Client data collected are analyzed across two groups of youth: youth who are "not at home" and youth who are self-identified as "at home" (the comparison group). A comparative analysis is conducted on client demographics, AOD history, and high-risk indicators.

## Characteristics of Youth in High-Risk Environments

### *Demographics*

The demographics of at-home and not-at-home youth are presented in table 11. Preliminary data indicated no significant differences between the two groups along client demographics.

### *AOD History*

Table 12 illustrates AOD histories of the two populations. Data indicated that the age of first use by the not-at-home group versus the at-home group varied by substance. Eighty-four percent of the at-home youth had ever used alcohol, while 55 percent had ever used marijuana, 18 percent cocaine, and

**Table 11. Client demographics**
**($N = 476$)**

| Characteristic | At home ($n$ = 129, 27.1 percent) | Percent | Not at home* ($n$ = 347, 72.9 percent) | Percent |
|---|---|---|---|---|
| Sex | | | | |
| Female | 43 | 33 | 97 | 28 |
| Male | 86 | 67 | 250 | 72 |
| Race | | | | |
| White | 67 | 52 | 180 | 52 |
| Hispanic | 22 | 17 | 31 | 9 |
| African American | 35 | 27 | 105 | 30 |
| American Indian | 2 | 2 | 28 | 8 |
| Asian/Pacific Islander | 1 | 0 | 3 | 0 |
| Other | 2 | 2 | 0 | 0 |
| Age (years) | | | | |
| Under 10 | 3 | 2 | 4 | 1 |
| 10–13 | 8 | 6 | 9 | 3 |
| 14–17 | 34 | 26 | 106 | 31 |
| 18–21 | 81 | 63 | 224 | 65 |
| Over 21 | 3 | 2 | 4 | 1 |

*In foster placement (9), in temporary foster home (2), temporary living arrangement (59), with relative (31), with friend (110), and undomiciled (136).

12 percent inhalants. Respectively, 97 percent, 80 percent, 49 percent, and 35 percent of the not-at-home youth reported ever having used those substances.

Table 12 also illustrates that the not-at-home group reported more AOD use within the past week. Specifically, the not-at-home group reported greater use of alcohol, marijuana, cocaine, and inhalants than the at-home group.

## *High-Risk Indicators*

Table 13 depicts data on high-risk indicators. These data clearly indicated that the project was reaching at-risk youth, with the not-at-home group reporting a strikingly higher incidence of certain high-risk factors, including being children of AOD abusers, victims of abuse, dropouts, delinquents, economically disadvantaged, and homeless.

**Table 12. Alcohol and other drug history**
**($N$ = 375)**

| Substance | Ever used | Percent | Average age of first use (years) | Used in past week | Percent |
|---|---|---|---|---|---|
| | | At home ($n$ = 95, 25 percent) | | | |
| No use | 11 | 12 | — | — | — |
| Alcohol | 80 | 84 | 13.8 | 23 | 24 |
| Marijuana | 52 | 55 | 15.0 | 15 | 16 |
| Depressants | 6 | 6 | 14.3 | 1 | 1 |
| Stimulants | 12 | 13 | 15.1 | 0 | 0 |
| Hallucinogenics | 9 | 10 | 15.7 | 0 | 0 |
| Opiates (heroin) | 3 | 3 | 16.3 | 0 | 0 |
| Cocaine | 17 | 18 | 16.4 | 2 | 2 |
| Inhalants | 11 | 12 | 13.8 | 4 | 4 |
| Nonprescription | 6 | 6 | 11.2 | 1 | 1 |
| | | Not at home ($n$ = 280, 75 percent) | | | |
| No use | 7 | 3 | — | — | — |
| Alcohol | 272 | 97 | 13.2 | 190 | 68 |
| Marijuana | 225 | 80 | 13.9 | 116 | 41 |
| Depressants | 35 | 13 | 14.4 | 1 | 0 |
| Stimulants | 66 | 24 | 15.2 | 2 | 1 |
| Hallucinogenics | 45 | 16 | 15.9 | 2 | 1 |
| Opiates (heroin) | 32 | 11 | 15.6 | 5 | 2 |
| Cocaine | 138 | 49 | 15.7 | 43 | 15 |
| Inhalants | 97 | 35 | 15.1 | 38 | 14 |
| Nonprescription | 8 | 3 | 16.8 | 1 | 0 |

## Summary and Recommendations

Preliminary client data indicated that LSAPP was reaching AOD-using youth in high-risk environments. Also, AOD use was substantially more common in the not-at-home group, which had reported a higher incidence of high-risk indicators.

**Table 13. Risk factors**
**($N$ = 298)**

| Factor | At home ($n$ = 93) | Percent | Not at home ($n$ = 205) | Percent |
|---|---|---|---|---|
| Child of substance abuser | 21 | 23 | 76 | 37 |
| Pregnant or parent | 2 | 2 | 14 | 7 |
| Victim of abuse | 8 | 9 | 85 | 42 |
| Dropout | 11 | 12 | 94 | 46 |
| Attempted suicide | 15 | 16 | 34 | 17 |
| Violent or delinquent | 17 | 18 | 64 | 31 |
| Severe emotional problems | 7 | 8 | 33 | 16 |
| Economically disadvantaged | 16 | 17 | 111 | 54 |
| Physically disabled | 0 | 0 | 3 | 2 |
| Latchkey | 11 | 12 | 22 | 11 |
| Homeless, throwaway, runaway | 6 | 7 | 132 | 64 |

# An Early Intervention Study of Delinquent Adolescents Using Alcohol and Other Drugs

*Arlene Utada, M.Ed.*

This section reports on the characteristics, attitudes, and behaviors of adolescents participating in an early intervention study that was organized and conducted in two day-school centers in the city of Philadelphia. The target population consisted of court-referred delinquent adolescent boys, most of whom were African American and economically disadvantaged. Of 180 students who participated in the first year of the program, data are reported on 78 who met program criteria of either very high risk for alcohol and other drug (AOD) use, or early use of gateway drugs.

## Demographics

The sample was 100 percent male, and the average age was 15.9 years. African American youth comprised the largest racial group (65 percent), while Whites accounted for 31 percent and Hispanics for 4 percent.

## Family Structure

About three-quarters (76 percent) of the study youths' families were categorized as "nonintact" for the following reasons: parents never married (14 percent), parents separated (29 percent), parents divorced (18 percent), and parent deceased (15 percent). Consequently, during the past year only 19 percent of these youth had lived with both of their biological parents; when that 19 percent was added to the 17 percent living in a parent-stepparent situation, the number of boys in two-parent living arrangements equaled 36 percent. The largest proportion of boys (45 percent) lived with their mothers, who had no partners. Another 10 percent lived with "other relatives," and the remaining 9 percent lived in a combination of "group home" and with their fathers.

Consistent with living-arrangement data, 56 percent of the sample reported their mothers or stepmothers to be the head of the household, 29 percent reported a combination of fathers and stepfathers as household head, and grandparents accounted for 11 percent.

## Employment History

In the study, youths reported that 59 percent of the identified heads of household were currently employed and a substantial proportion (41 percent) were unemployed. "Skilled manual labor" was the most common job type reported. One-third (33 percent) of the household heads had jobs at a level higher than skilled manual, while 67 percent were classified as skilled manual or below. Of these, 20 percent were reported to have no work history, on welfare, or disabled.

## Parental Education

The average or mean level of educational attainment was quite low for the sample's parents, with 10.5 years of education for the mothers and 9.3 years of education for the fathers. The families-of-origin of the study population were larger than the national average, with a mean of 4.2 children; the average households in which these youth lived contained 4.8 persons.

## School-Related Problems

When asked about school-related problems, the study youths reported having been absent from school for more than an average of 4 days in the past month (4.2 days), but they admitted being truant for only 1 of those 4 days. The most frequently reported school problems were that they were bored by school (47 percent), that school was not enjoyable (35 percent), that they were disruptive in class (24 percent), and that they had trouble reading (23 percent).

## Educational Expectations

As a whole, the sample expected to complete high school; the average years of education expected was 12.9. Therefore, the typical student expected to complete a year of education or training after high school graduation. Ostensibly reflecting an awareness of their problems, 46 percent responded positively (either "a little," "a fair amount," or "a lot") when asked how important counseling for school problems was for them.

## Social Problems

Regarding their social lives, one-third (34 percent) reported spending either "a fair amount of time" or "a lot of time" with friends who used drugs. They reported spending an average of 4 hours per weekday "hanging out." In general, these youths did not report dissatisfaction with their social lives. This finding is consistent with research, which had found that adolescent AOD users typically had more active, "satisfying" social lives than their nonusing, "straight" peers. Eighty-six percent of the study youth reported that they were sexually active, and of these, 67 percent claimed to use birth control or reported that their partners used birth control.

To determine the degree of social problems, difficulties, and conflict the study youth were experiencing, they were asked how many days during the past month they had experienced serious problems with close friends, girlfriends, and other young people. The group reported an average of 1.7 days per month of problems with close friends and girlfriends, and 2.6 with other young people (acquaintances). Thirty-nine percent acknowledged the importance of getting "help" or counseling for their current social problems.

## Family Relationships

Concerning problems in the immediate families of the study youth, 36 percent reported that a member of their immediate family had an alcohol problem. Approximately one-fourth (24 percent) of the youth perceived either "a fair amount" or "a lot" of conflict in their families, and almost half (47 percent) reported that their family was "no" fun to live with. When asked how well they got along with their mothers, 94 percent responded "not at all" or "a little bit," and only 6 percent said either "a fair amount" or "a lot."

Regarding fathers, 56 percent reported getting along with them either "not at all" or "a little bit." Almost half (47 percent) stated they were "not at all" satisfied with how well they got along with their families.

Answering questions about their relationships with their mothers, 79 percent claimed to be "not at all" close to their mothers, and 69 percent reported that they could "not at all" rely on what their mothers told them. More of the youth reported "a lot" or "a fair amount" of difficulty talking to their fathers about "things that bother them" (43 percent) than to their mothers (35 percent). These data suggested considerable difficulty in primary relationships. That they got along less well with, did not feel close to, and mistrusted their mothers, yet still found them easier to talk with than their fathers, suggested the following serious problems: That for many of the young men their mothers were their only active parent; that their relationship with "mother" was difficult and marked by conflict and simultaneous mixed emotions of distrust and dependence; and that these problems suggested a lifestyle of interpersonal discomfort, dissatisfaction, and unresolved need.

## Behavioral and Psychosocial Problems

The behavioral and psychosocial problems self-reported by the study sample (see table 14) appear to be a combination of guarded, paranoid reactions; aggressive, if not violent impulses and behaviors; and a degree of sensitive, easily hurt feelings.

A higher than expected proportion of the study youth reported experiencing serious symptoms of psychological distress lasting about a week or more, both in their lifetimes and in the past month. Seventy-one percent reported experiencing a significant period of depression in their lifetimes; 59 percent reported significant anxiety or tension; 47 percent reported having had trouble

**Table 14. Behavioral and psychosocial problems of the study sample**

| Item | Percent |
|---|---|
| Feel they are watched or talked about by others | 58 |
| React by slamming door, breaking things, and so forth | 54 |
| Feel people cannot be trusted | 53 |
| Get crazy ideas | 46 |
| Feel afraid they will hurt someone physically | 46 |
| Get into fights or arguments easily | 45 |
| Get hurt feelings easily | 37 |
| Feel very self-conscious | 37 |
| Do angry things they cannot control | 36 |
| Feel bored | 35 |

controlling violent behavior; and 46 percent reported trouble "understanding, concentrating, or remembering." Slightly more than 20 percent reported experiencing these symptoms in the past 30 days.

## Juvenile Justice Problems

Since youths referred to the program were on probation or under some other form of court supervision, high rates of self-reported offenses were anticipated. Participants reported offenses they had committed one or more times in the past three months: alcohol and/or drug possession, 58 percent; curfew violation, 53 percent; truancy, 36 percent; possession of a weapon, disorderly conduct, 33 percent; and drug sales and trafficking, 18 percent.

## Alcohol and Other Drug Use

To determine the extent and severity of AOD use among these youth, they were asked about their frequency of current use of 13 drugs. As expected, alcohol was the drug used by the largest percentage of the sample in the past month (84 percent), with a total of 94 percent ever having used it. Fifty-three percent of the sample reported use of marijuana in the past month, and a total of 74 percent had ever used marijuana (the difference between these two scores means that 21 percent had not smoked marijuana in the past month). Cocaine and crack cocaine together were used currently by 24 percent of the sample and had ever been used by 42 percent. Current use of hallucinogens and phencyclidine (PCP/angel dust) was reported at 5 percent each. Total past and current use of these two drugs was 6 percent for hallucinogens and 10 percent for PCP.

A question about the amount of alcohol "usually" consumed yielded the following results: 40 percent of the total sample and 49 percent of those who drank alcohol "at all" in the past month reported that they "usually" drank seven or more drinks on the days they drank alcohol. Twenty-two percent reported that they "usually" drank 4 to 6 drinks; 19 percent drank between 1 and 3 drinks; and another 19 percent reported no current alcohol use on this item. With a total of 62 percent usually drinking at least 4 drinks on the days they drank alcohol, it was obvious that they were drinking to feel the effects of the alcohol. When asked how many times they had been drunk in the past month, 63 percent reported at least one incidence of drunkenness. Forty-two percent reported between 1 and 5 times, and 12 percent reported they had been drunk more than 10 times.

Overall, the behavioral and AOD problems reported were staggering. The profile that emerged was one of substantial psychological and emotional problems, which were aggravated or potentiated by the many difficult and problem-laden family situations reported by the youth. When the facts are added that all of the youths had been arrested, that a substantial proportion had AOD problems severe enough to warrant treatment, and that the families and parents of the majority of the youth were quite limited in their resources, a picture emerged of youth at great risk or "over the edge," and in need of a major rehabilitation and treatment effort.

# A Profile of High-Risk Young Women in the Girls Clubs of America's "Friendly PeerSuasion" Project

*Dolores Wisdom*

## Program Description

Friendly PeerSuasion, a targeted, alcohol and other drug (AOD) education program developed by Girls Clubs of America, was designed to prevent and reduce AOD use among adolescent girls at high risk of becoming users of tobacco, alcohol, prescription and over-the-counter drugs, inhalants, and illegal substances. The program uses a peer leadership approach to prevention education and is directed primarily at girls in high-risk environments aged 11 to 14. Girls Clubs is developing, testing, evaluating, and refining the Friendly PeerSuasion program before replicating it in the 240 affiliated Girls Club Centers nationwide.

Girls Clubs of America is working in conjunction with five of its local clubs to develop, test, and refine the Friendly PeerSuasion program and curriculum. These field test sites are the Girls Clubs of Arlington, TX (which is the lead demonstration site); Birmingham, AL; Pinellas County, FL; Rapid City, SD; and Worcester, MA. More than 5,000 adolescent girls and young women will receive services during the 3-year test of the model.

The goal of Friendly PeerSuasion is to encourage girls and young women to choose healthy and productive alternatives to AOD use. Curriculum education, peer teaching, parental involvement, and specific interventions (e.g., personal counseling and referral) are provided through the model.

Active learning in four topic areas—communication, stress management, peer and other social pressure, and AOD use prevention leadership—offers girls in high-risk environments aged 11 to 14 an opportunity to acquire information and practice new skills in an informal atmosphere. Through a 14-hour curriculum of structured activities, the girls (called PeerSuaders) learn about community resources and practice refusal skills, decisionmaking, goal setting, and problem solving. Role playing, lectures followed by group discussions, specially designed hands-on learning activities, and visually appealing handouts are used to convey information.

After completing their preparatory learning, the PeerSuaders divide into teaching teams of two to four girls and work under the guidance of Girls Clubs staff in developing lesson plans to teach younger girls (PeerSuade-Me's) ages 6 to 10 how to avoid AODs. PeerSuader teaching teams meet for 5 to 10 hours over a 2-week period to prepare lessons. Each team develops its own learning approach (e.g., role playing, hands-on activities), decides who will provide the training, and provides instruction in selected life-management skills and AOD awareness for groups of up to ten PeerSuade-Me's. This cross-age teaching averages 4 to 5 hours in length and provides instruction and positive role models for the younger girls. Cross-age teaching also reinforces the PeerSuaders' learning, boosts their self-esteem, and enhances their continued development of leadership skills and sense of community responsibility.

## Characteristics of Participants

### *Client Sample*

During the 3-year field test of Friendly PeerSuasion, the demonstration sites will enlist the participation of some 1,200 high-risk early adolescent girls ages 11 to 14 and nearly 4,000 girls ages 6 to 10.

The five pilot demonstration sites served a total of 446 PeerSuaders and PeerSuade-Me's during the field test. All participants were females. One hundred twenty-six PeerSuaders received Friendly PeerSuasion training and subsequently led PeerSuade-Me teaching sessions. An additional 320 PeerSuade-Me's participated in sessions taught by their older peers. Most participants were African American (49 percent) or White (44 percent). Low rates of participation by Hispanics or American Indians were seen. Most PeerSuaders (77 percent) were between 10 and 12, and only 23 percent were 13 to 15 years old. PeerSuade-Me's were overwhelmingly in the 5-to 9-year-old range (87 percent). Only 13 percent were over 9 years of age.

Girls who participated in the program, either as PeerSuaders or PeerSuade-Me's shared many high-risk characteristics. Half of the program participants are latchkey children, spending hours alone each day without adult or parental supervision. Over half are economically disadvantaged, and three out of five were judged by Girls Clubs staff to be at very high risk for AOD use. Table 15 shows the pattern of risk characteristics of the two groups.

**Table 15. Risk characteristics: PeerSuaders and PeerSuade-Me's**

| | PeerSuaders (*n* = 126) | PeerSuade-Me's (*n* = 320) |
|---|---|---|
| Latchkey | 60% | 47% |
| Children of AOD abusers | 7% | 15% |
| Economically disadvantaged | 41% | 55% |
| At risk | 100% | 44% |

## Program Effectiveness

In a review session held after the field test, staff reported examples of the program's effectiveness with individual participants. They spoke of PeerSuaders who had formerly been antagonistic toward each other becoming friends as they progressed through the program, and of others blossoming from shy, passive nonleaders and reluctant club participants into take-charge, active, responsible, and prepared leaders.

One of these "blossomers" was Rosselyn, a 12-year-old African-American latchkey girl from an economically disadvantaged environment. A long-time Girls Club member, Rosselyn had always been a follower—more inclined to stand back and let others speak for her than to speak for herself. With staff encouragement during the curriculum education phase, Rosselyn became more verbal, and later she contributed several ideas to her partner in the lesson preparation phase. On the first day of teaching she played "second fiddle" to her partner. But on the second and third days, when her partner was absent, Rosselyn's personality completely changed as she confidently led the PeerSuade-Me's through well-planned activities. When her partner returned, negotiations took place about Rosselyn's role in the teaching team. Her confidence increased tremendously by the realization that she could do it; Rosselyn was no longer satisfied to play a backup role.

Friendly PeerSuasion's peer structure apparently contributed greatly to girls' growth. Staff reported many stories similar to that of Kendra: African American, 12 years old, economically disadvantaged, and latchkey, Kendra was a long-time club member who had gained a reputation among other club members and staff as a troublemaker. The type of girl who was always blamed for trouble, Kendra began Friendly PeerSuasion with a poor attitude; she was the proverbial clown and attention getter whose ideas were dismissed by other participants because of her reputation. As the stages of Friendly PeerSuasion progressed, so did Kendra. By the time her involvement in the program ended, Kendra was a positive role model, a "star" of the class, and she had developed close friendships with girls who had previously rejected her. Her new attitude has transferred to her participation in other club programs.

Girls Clubs traditionally serve girls and young women most in need, including girls with disabilities. Kathy was a new club member with low reading abilities. The other club members quietly and matter-of-factly assumed responsibility for helping her to read. Joan was an 11-year-old White latchkey child who was hearing impaired. She could lip-read and sign well, but she had few other verbalization skills. During curriculum education, the other PeerSuaders made sure they faced Joan when speaking or wrote notes to her; during teaching she had nonverbal roles to play. Both staff and PeerSuaders made curriculum adaptations and took other necessary action to welcome Joan's full participation in the program. The "biggest challenge," staff indicated, was having to "finger-spell" drug names during an activity!

## CHAPTER 2

# Planning Models

## Introduction

This chapter was not anticipated in the original plan for this AOD use prevention monograph, but several of the articles illustrated systematic planning models. Content of these articles ranges from a presentation of theoretical models for planning services to a discussion of intake forms that could be used in planning specific services for individual clients. The clear implication in this chapter is that time must be allowed to systematically plan services for youth in high-risk environments.

Danish, Mash, and Howard used Jessor's Problem Behavior Theory to develop a planning map for high-risk, inner-city youth in Richmond, Virginia. They were concerned about the transportability of prevention programs that have been developed under quasi-laboratory conditions to high-risk populations. These authors emphasized the need to develop an understanding of the etiology of problem behavior for a particular population and to match this understanding with a particular target group. This matching process also includes developing and adapting materials for the high-risk population.

Hall and Reyes identified the lack of data and models for guiding the development of prevention programs for Hispanics. They also placed the problems of Hispanic youth in historical and multicultural contexts. Then they focused on how those problems interact with problems of adolescent development. Their article is particularly useful for thinking about the needs of Hispanics but the issues are relevant to planning for any ethnic/racial population.

Terry, Silka, and Terry presented an approach to evaluation that addressed issues program developers should consider in initiating an evaluation. They indicated an awareness of the difficulties of initiating community change by means of multimodal interventions and simultaneously assessing these innovations and their subsequent impact in a controlled, empirical fashion. They combined two models into a 16-cell matrix reflecting the evolution of programs and suggested types of indicators reflecting success in the 16 cells of their total model. This is an excellent example of systematic planning and the interactions of individuals, communities, and cultures.

Coleman and Sarmanian have provided us with a management tool for developing and maintaining client records. The program was an alternative to incarceration for delinquent youth, and the client form was created in response to a requirement for a formal intake process. This article contains a generic client data form that could serve a number of grantee and agency reporting needs.

# Adolescent Profile Form Developed for the Cumberland Day Treatment Program

*Gregory J. Coleman, M.A., and Jack Sarmanian, L.C.S.W.*

## Program Description

The Cumberland Day Treatment Program (CDTP) is a community-based sentencing alternative for delinquent youth of Cumberland County, New Jersey. CDTP is operated by the New Jersey Department of Corrections, Division of Juvenile Services. In 1987 the program was awarded a comprehensive alcohol and other drug (AOD) use prevention and intervention grant through OSAP to develop a programmatic component for youth who are AOD users.

CDTP is a comprehensive day treatment model serving 20 male and female juvenile offenders under an alternative to incarceration. (See fig. 1 for an overview of CDTP.) The program offers a multiservice approach to disturbed adolescents who reflect severe adolescent adjustment problems, school dysfunction, family disturbance, acting-out syndrome, criminal behavior, and AOD problems. CDTP provides services to court-referred youth ages 13 to 18 in a day treatment program 5 days a week. Average length of stay in CDTP is approximately 6 months. The day care model provides several service components in a 12-hour period: counseling, treatment services, remedial education, prevocational work experience, and AOD counseling and education. AOD use assessment and prevention are provided through the Cumberland County Alcoholism Treatment Department. A family therapy component was implemented through the South Jersey Drug Treatment Center, offering family therapy near or in the home. In addition, a comprehensive health and human sexuality education program was provided by Family Planning Services of Cumberland and Gloucester counties.

CDTP subdivides the population into two age groups to assure age-appropriate settings and specialized service delivery. The staff provides protocol, limits, and expectations of behavior, thereby creating a safe, consistent, and positive environment in which the youth can change and grow. Through positive role modeling and intense scheduling, the staff offer a unique day treatment model of prevocational work experience, remedial individualized educational programming, and individual and group therapy services. The design is further augmented by integrating existing community services to meet the individual needs of the youth and their families.

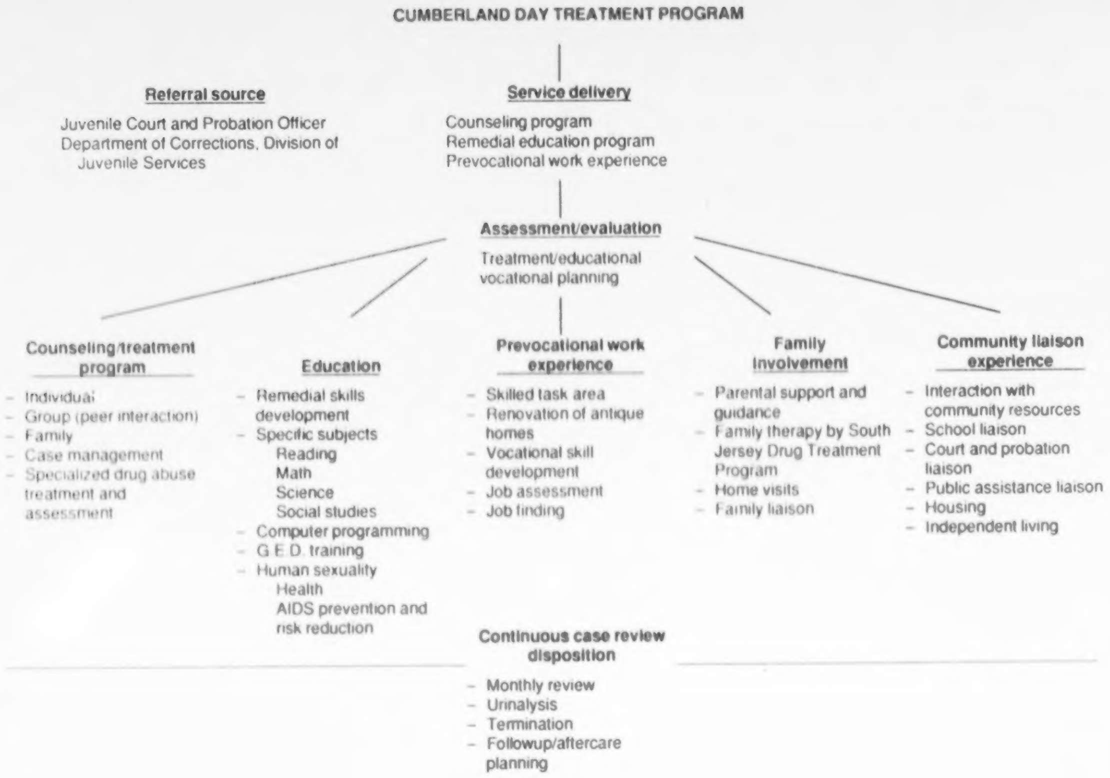

CUMBERLAND DAY TREATMENT PROGRAM
Referral source
Juvenile Court and Probation Officer
Department of Corrections, Division of Juvenile Services
Service delivery
Counseling program
Remedial education program
Prevocational work experience
Assessment/evaluation
Treatment/educational vocational planning
Counseling/treatment program
- Individual
- Group (peer interaction)
- Family
- Case management
- Specialized drug abuse treatment and assessment
Education
- Remedial skills development
- Specific subjects
Reading
Math
Science
Social studies
- Computer programming
- G.E.D. training
- Human sexuality
Health
AIDS prevention and risk reduction
Prevocational work experience
- Skilled task area
- Renovation of antique homes
- Vocational skill development
- Job assessment
- Job finding
Family involvement
- Parental support and guidance
- Family therapy by South Jersey Drug Treatment Program
- Home visits
- Family liaison
Community liaison experience
- Interaction with community resources
- School liaison
- Court and probation liaison
- Public assistance liaison
- Housing
- Independent living
Continuous case review disposition
- Monthly review
- Urinalysis
- Termination
- Followup/aftercare planning

**Figure 1. Overview of the Cumberland Day Treatment Program**

The primary goal of CDTP is to assist the adolescent to

- develop internal controls and limits over impulsive behavior,
- abstain from AOD use,
- develop self-confidence,
- realize and strengthen family dynamics and relationships, and
- enhance learning skills and achievement for returning to the mainstream through family adjustment, school reentry, and/or job acquisition.

Service delivery is determined by comprehensive assessment and evaluation in the treatment, educational, and vocational phases, which include

- formal psychosocial and intake evaluation;
- prior historical data from medical, school, and court records; and
- case disposition conferences to assure an individualized treatment plan for each adolescent.

Ongoing evaluation of all phases of programming, case conferences with integral staff, urinalysis, and community liaison with family court personnel and significant others are used to assess the adolescents and determine program privileges, length of stay, aftercare, ultimate return to the community, and court relinquishment.

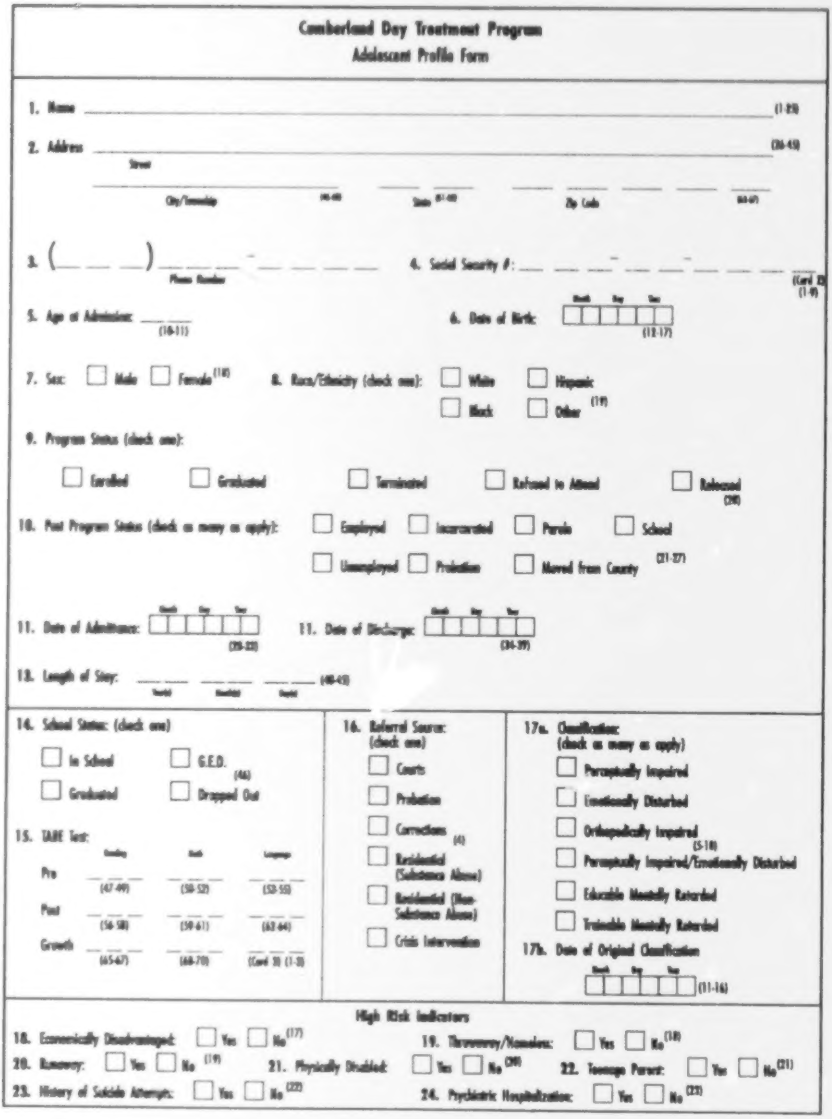
## Planning Considerations

### *The Development Process*

Because of the desire for comprehensive client assessment, the program has struggled to develop adequate assessment tools and a data base of youth served. Information was gathered to develop a comprehensive adolescent profile to assure individual treatment goals and case planning. A further need developed because of OSAP grant requirements to provide data on client delivery and services through the Management Information Form (MIF).

The Adolescent Profile Form (APF) (see fig. 2) was developed as a basic intake data sheet incorporating the history of the adolescent. The form was designed with computers in mind, to facilitate data input display, tabulation, and analysis.

The APF is intended for use with each client at intake and at the second, fourth, and sixth month of program involvement. An aftercare schedule was to be developed for followup of the client over time.



**Cumberland Day Treatment Program**
**Adolescent Profile Form**

1. Name ______________________________ (1-25)

2. Address ______________________________ (26-45)
Street
______________ City/Township ______ State ______ Zip Code

3. (___ ___ ___) ___ ___ ___ - ___ ___ ___ ___
Phone Number

4. Social Security #: ___ ___ ___ - ___ ___ - ___ ___ ___ ___ (Card 2) (1-9)

5. Age at Admission: ___ ___ (10-11)

6. Date of Birth: Month ☐☐ Day ☐☐ Year ☐☐ (12-17)

7. Sex: ☐ Male ☐ Female (18)

8. Race/Ethnicity (check one): ☐ White ☐ Hispanic ☐ Black ☐ Other (19)

9. Program Status (check one):
☐ Enrolled ☐ Graduated ☐ Terminated ☐ Refused to Attend ☐ Released (20)

10. Post Program Status (check as many as apply): ☐ Employed ☐ Incarcerated ☐ Parole ☐ School ☐ Unemployed ☐ Probation ☐ Moved from County (21-27)

11. Date of Admittance: Month ☐☐ Day ☐☐ Year ☐☐ (28-33)

11. Date of Discharge: Month ☐☐ Day ☐☐ Year ☐☐ (34-39)

13. Length of Stay: ___ ___ ___ ___ ___ ___ (40-45)

14. School Status: (check one)
☐ In School ☐ G.E.D. (46)
☐ Graduated ☐ Dropped Out

15. TABE Test:

| | Reading | Math | Language |
|---|---|---|---|
| Pre | ___ ___ ___ (47-49) | ___ ___ ___ (50-52) | ___ ___ ___ (53-55) |
| Post | ___ ___ ___ (56-58) | ___ ___ ___ (59-61) | ___ ___ ___ (62-64) |
| Growth | ___ ___ ___ (65-67) | ___ ___ ___ (68-70) | ___ ___ ___ (Card 3) (1-3) |

16. Referral Source: (check one)
☐ Courts
☐ Probation
☐ Corrections (4)
☐ Residential (Substance Abuse)
☐ Residential (Non-Substance Abuse)
☐ Crisis Intervention

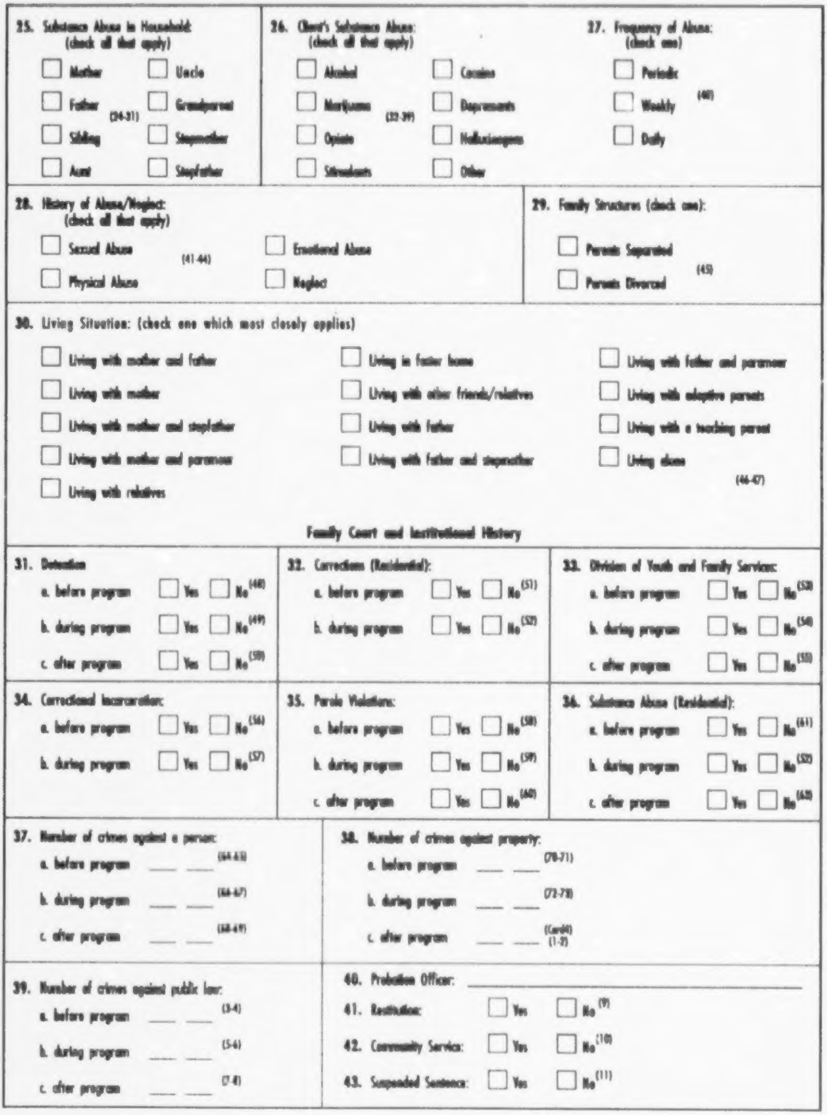
17a. Classification: (check as many as apply)
☐ Perceptually Impaired
☐ Emotionally Disturbed
☐ Orthopedically Impaired (5-10)
☐ Perceptually Impaired/Emotionally Disturbed
☐ Educable Mentally Retarded
☐ Trainable Mentally Retarded

17b. Date of Original Classification
Month ☐☐ Day ☐☐ Year ☐☐ (11-16)

**High Risk Indicators**

18. Economically Disadvantaged: ☐ Yes ☐ No (17)
19. Throwaway/Homeless: ☐ Yes ☐ No (18)
20. Runaway: ☐ Yes ☐ No (19)
21. Physically Disabled: ☐ Yes ☐ No (20)
22. Teenage Parent: ☐ Yes ☐ No (21)
23. History of Suicide Attempts: ☐ Yes ☐ No (22)
24. Psychiatric Hospitalization: ☐ Yes ☐ No (23)

Figure 2. Adolescent Profile Form.



25. Substance Abuse in Household: (check all that apply)
☐ Mother
☐ Father (24-31)
☐ Sibling
☐ Aunt
☐ Uncle
☐ Grandparent
☐ Stepmother
☐ Stepfather

26. Client's Substance Abuse: (check all that apply)
☐ Alcohol
☐ Marijuana (32-39)
☐ Opiate
☐ Stimulants
☐ Cocaine
☐ Depressants
☐ Hallucinogens
☐ Other

27. Frequency of Abuse: (check one)
☐ Periodic
☐ Weekly (40)
☐ Daily

28. History of Abuse/Neglect: (check all that apply)
☐ Sexual Abuse (41-44)
☐ Physical Abuse
☐ Emotional Abuse
☐ Neglect

29. Family Structures (check one):
☐ Parents Separated
☐ Parents Divorced (45)

30. Living Situation: (check one which most closely applies)
☐ Living with mother and father
☐ Living with mother
☐ Living with mother and stepfather
☐ Living with mother and paramour
☐ Living with relatives
☐ Living in foster home
☐ Living with other friends/relatives
☐ Living with father
☐ Living with father and stepmother
☐ Living with father and paramour
☐ Living with adoptive parents
☐ Living with a teaching parent
☐ Living alone
(46-47)

Family Court and Institutional History

31. Detention
a. before program ☐ Yes ☐ No (48)
b. during program ☐ Yes ☐ No (49)
c. after program ☐ Yes ☐ No (50)

32. Corrections (Residential):
a. before program ☐ Yes ☐ No (51)
b. during program ☐ Yes ☐ No (52)

33. Division of Youth and Family Services:
a. before program ☐ Yes ☐ No (53)
b. during program ☐ Yes ☐ No (54)
c. after program ☐ Yes ☐ No (55)

34. Correctional Incarceration:
a. before program ☐ Yes ☐ No (56)
b. during program ☐ Yes ☐ No (57)

35. Parole Violations:
a. before program ☐ Yes ☐ No (58)
b. during program ☐ Yes ☐ No (59)
c. after program ☐ Yes ☐ No (60)

36. Substance Abuse (Residential):
a. before program ☐ Yes ☐ No (61)
b. during program ☐ Yes ☐ No (62)
c. after program ☐ Yes ☐ No (63)

37. Number of crimes against a person:
a. before program ___ ___ (64-65)
b. during program ___ ___ (66-67)
c. after program ___ ___ (68-69)

38. Number of crimes against property:
a. before program ___ ___ (70-71)
b. during program ___ ___ (72-73)
c. after program ___ ___ (Card4) (1-2)

39. Number of crimes against public law:
a. before program ___ ___ (3-4)
b. during program ___ ___ (5-6)
c. after program ___ ___ (7-8)

40. Probation Officer: ______________________
41. Restitution: ☐ Yes ☐ No (9)
42. Community Service: ☐ Yes ☐ No (10)
43. Suspended Sentence: ☐ Yes ☐ No (11)

Figure 2. Adolescent Profile Form (continued).

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44. History of Offenses (check all that apply):

| Offense | Before Program | During Program | After Program | Disposition Incarcerated |
|---|---|---|---|---|
| Rape | ☐ (12) | ☐ (13) | ☐ (14) | ☐ (15) |
| Sexual Assault | ☐ (16) | ☐ (17) | ☐ (18) | ☐ (19) |
| Simple Assault | ☐ (20) | ☐ (21) | ☐ (22) | ☐ (23) |
| Aggravated Assault | ☐ (24) | ☐ (25) | ☐ (26) | ☐ (27) |
| Robbery | ☐ (28) | ☐ (29) | ☐ (30) | ☐ (31) |
| Theft | ☐ (32) | ☐ (33) | ☐ (34) | ☐ (35) |
| Larceny | ☐ (36) | ☐ (37) | ☐ (38) | ☐ (39) |
| Received Stolen Property | ☐ (40) | ☐ (41) | ☐ (42) | ☐ (43) |
| Burglary | ☐ (44) | ☐ (45) | ☐ (46) | ☐ (47) |
| Motor Vehicle Theft | ☐ (48) | ☐ (49) | ☐ (50) | ☐ (51) |
| Arson | ☐ (52) | ☐ (53) | ☐ (54) | ☐ (55) |
| Vandalism/Trespassing | ☐ (56) | ☐ (57) | ☐ (58) | ☐ (59) |
| Weapons | ☐ (60) | ☐ (61) | ☐ (62) | ☐ (63) |
| Criminal Mischief | ☐ (64) | ☐ (65) | ☐ (66) | ☐ (67) |
| Disorderly Conduct | ☐ (68) | ☐ (69) | ☐ (70) | ☐ (71) |
| Contempt, Parole/Probation Violation | ☐ (72) | ☐ (Card5) (1) | ☐ (2) | ☐ (3) |
| Running Away | ☐ (4) | ☐ (5) | ☐ (6) | ☐ (7) |
| Truancy | ☐ (8) | ☐ (9) | ☐ (10) | ☐ (11) |
| Liquor Offense | ☐ (12) | ☐ (13) | ☐ (14) | ☐ (15) |
| Incorrigible | ☐ (16) | ☐ (17) | ☐ (18) | ☐ (19) |
| Drug Charge | ☐ (20) | ☐ (21) | ☐ (22) | ☐ (23) |
| Total | ___ ___ (24-25) | ___ ___ (26-27) | ___ ___ (28-29) | ___ ___ (30-31) |

45. Other/Comments ______________________________

Figure 2. Adolescent Profile Form (continued).

The first task in developing the APF instrument was to identify specific data needed to satisfy the MIF reporting requirements and additional data that CDTP would find useful. Additional questions were designed to record followup and aftercare activities. The questions were organized into four categories: basic identifying and background data, high-risk indicators, family court and institutional history, and history of offenses.

## *Adolescent Profile Form*

*Basic Identifying and Background Data.* This category contains general identifying data such as name, age, address, sex, and race; client status and dates of admission to the program; and client's school status, whether the client has been classified as having a learning disability, and if so, when it was determined. (See fig. 2, questions 1 to 17b.)

*High-Risk Indicators.* Some of the items in this category were taken from the MIF. The additional items were added as indicators of high risk from the program's experience. (See fig. 2, questions 18 to 30.)

*Family Court and Institutional History.* This category contains items that relate to preprogram and postprogram involvement with the courts, corrections, and other services. Recorded information includes the name of the probation officer, whether the client has restitution or community service, and whether the client comes to the program with a suspended sentence. (See fig. 2, questions 31 to 43.)

*History of Offenses.* This final category (see fig. 2, question 44) contains a list of the clients' most common offenses. The response columns allow for indicating whether the offenses occurred before, during, or after program participation, and the sentencing disposition (whether the participant was sentenced to the State's correctional facility). The offenses are grouped by type: crimes against persons, crimes against property, and crimes against public law. Once the history of offenses matrix is completed, the numbers and types of offenses before, during, and after the program can be compiled.

*Comments.* The form ends with an open-ended section where diagnostic impressions or significant data on the adolescent can be filled in. (See fig. 2, question 45.)

## *Computer Program*

The APF compilation program is a basic data base-type program written in Apple BASIC on an Apple II g.s. It is designed to be simple enough for anyone to use and can be modified with a knowledge of Apple BASIC.

The main menu for this program is as follows:

1. List all people
2. Request all information on a particular person
3. Find all people with a particular characteristic
4. Find all people who share two characteristics
5. Find a particular characteristic of a particular person
6. List all data
7. Quit

*Choice 1.* "List all people" lists all people currently in the data bank. The user generally selects choice 1 first, to see all the names available for information processing.

*Choice 2.* "Request all information on a particular person" gives the user an opportunity to view all information on any one person in the data bank. The user has the option of obtaining a print copy of the data displayed as the adolescent profile or summary data sheet.

*Choice 3.* "Find all people with a particular characteristic" allows the user to list all people with a certain characteristic. The program searches the data bank and outputs the names of all persons with this characteristic. It then shows the user a total number of people in the data bank with this characteristic and the percentage of the entire data bank population represented.

*Choice 4.* "Find all people who share two characteristics" functions like choice 3, except that it cross-references two characteristics. The program automatically displays the names of the people who share the two characteristics, the total number in this subpopulation, and the percentage of the entire population represented.

*Choice 5.* "Find a particular characteristic of a particular person" is a quick-reference feature, which enables the user to extract a particular item of information on a specific person without viewing the entire file.

*Choice 6.* "List all data" lists the records of each person in the data bank. The user can control the speed of the screen display of the data, but there is no print option under this choice.

*Choice 7.* "Quit" is used to exit the program or input data. If the choice is to input data, the program automatically puts the user at the end of the data lines, ready to input new data.

## Discussion

The APF had a number of potential applications for CDTP. First, it would be an assessment and evaluation instrument for individualized case planning and treatment. (The need to develop and formulate diagnosis, treatment planning, and constant review of youth in high-risk environments is well known because the nature of their psychopathology, repetitive chronic offenses, or AOD involvement—all conditions that demand earlier intervention or specialized service delivery.) The APF instrument would help CDTP assess referrals and develop individual treatment plans and followthrough.

Second, the computerized file would allow CDTP to develop adolescent profiles for comparative purposes as well as establish an easy way to track the adolescent in the program or in aftercare. It would establish the initial data base to begin to determine the effectiveness of the program through longitudinal tracking of youth served. It would allow for consideration of client characteristics, program design, treatment considerations such as length of stay and specialized needs, and protocols for aftercare services.

Third, the APF was the beginning of CDTP's goal to establish an internal evaluation process to measure program effectiveness and to assess future program direction in terms of programming, staffing patterns, and/or community interaction and linkages.

Fourth, the APF might also have implications for the New Jersey Department of Corrections, Division of Juvenile Services, which operates 24-day treatment programs in communities as an alternative to incarceration. The use of APF with multiple programs might assist programs to view client characteristics for determining continuity of care of youth in high-risk environments.

Fifth, CDTP was aware of the opportunity that OSAP created for the program by its grant. OSAP required and made possible through the MIF, statistical analysis, administrative review of programming and staff development, and internal assessment and evaluation of the program. These requirements created the opportunity for a small program to begin to understand itself programmatically, question its goals and objectives, and realize the potential of its own effectiveness.

# “But Will It Play in Peoria?”: The Problem of Technology Transfer in Alcohol and Other Drug Use Prevention Programs

*Steven J. Danish, Ph.D., J. Mark Mash, M.S., and Catherine W. Howard-Gallagher, Ph.D.*

## Introduction

Literature is being amassed about what makes prevention programs work for youth. Several authors have summarized the necessary ingredients for effective school-based programs (Bernard et al. 1987; OSAP 1988; NMHA 1988). In addition, Price et al. (1988) have described 14 model prevention programs, some of which have been developed outside the schools. Among the components these authors have determined necessary are

- to set realistic goals based on what is possible, not what society wishes would happen;
- to base programs on a sound theoretical framework about alcohol and other drug (AOD) use prevention and adolescent development;
- to be integrated as part of a comprehensive kindergarten through 12th-grade health education curriculum;
- to involve families, community groups, and the media;
- to recognize the need for developing self-esteem and self-confidence;
- to use peer leaders; and
- to use accurate, current, and objective information.

It is apparent that effective prevention programs can be designed. However, for prevention programs to have a broad, long-term impact on AOD use, the technology of effective programs must be transferable. Unfortunately, the transfer of effective prevention programs from one site to another has been less than successful.

This document considers several components necessary for successful school-based AOD use prevention programs. It is believed that unless these components are addressed, prevention programs cannot be transferred successfully. Three components are examined:

- the need to develop and articulate a conceptual framework for understanding the target population and to match this framework with an appropriate prevention program;

- the need to develop program materials appropriate for the identified population; and
- the need to understand the setting and characteristics of the population in which the program is to be implemented.

## A Historical Review of School-Based AOD Use Prevention Programs

As background, a brief historical review of the AOD use prevention literature is presented, focusing on the various conceptual frameworks that have been adopted by prevention specialists.

Drug education first occurred in school curriculums in the 1880s (Globetti 1974). From then until the mid-1970s, proponents of prevention programs assumed that children and adolescents used AODs because they did not know the negative consequences associated with AOD use (NIDA 1985a). Except during the 1890s and the 1960s, prevention consisted of presenting accurate information about AOD use.

During the 1960s, AOD education relied more on scare tactics than on the presentation of information. Information was presented in a sensationalistic and misleading manner. A common approach was to have a policeman or an ex-addict tell anecdotes about the horrors of AOD use (Halleck 1970). Often the information was deliberately misleading in order to arouse fear in the students (Bukoski 1979). For example, the National Coordinating Council on Drug Education reviewed 500 AOD education films in 1972 and found that 80 percent contained misleading information (Horan and Harrison 1981).

Both the information and the scare tactics approaches to prevention were based on the concept that information would lead to attitude change, which would then lead to behavioral change. In general, although these efforts led to an increase in students' knowledge about AODs, they had little impact on attitudes toward AODs or on AOD use behavior (Berberian et al. 1976; Goodstadt 1980; Kearney and Hines 1980). Even the programs that increased negative attitudes toward AODs failed to reduce the level of AOD behavior (NIDA 1983). In fact, there is some evidence that information alone increases AOD experimentation (Goodstadt 1980; Stuart 1974; Tobler 1986). These results provided little support for programs that sought to prevent adolescent AOD use by educating students on the adverse consequences of such behavior.

In the 1970s, prevention efforts known as "affective education" began to target interpersonal and intrapersonal factors associated with AOD use among children and adolescents (Goodstadt 1975). Now the underlying assumption was that increased self-understanding and responsible decision-making would deter AOD use. Affective education programs focused on values clarification, analysis of consequences of behavioral choices, and identification of alternative activities to AOD use (NIDA 1985). The material was taught through classroom discussions and experiential activities.

A second prevention approach that gained prominence in the 1970s focused on alternate activities to AOD use (NIDA 1985a). The assumption underlying this strategy was that AOD use is directed at meeting unmet needs and that people will stop using AODs when they find better ways to meet those needs (Schaps et al. 1986). Alternative programs involved youth in community and school projects or AOD-free recreational activities.

Although both strategies made logical sense, neither was shown to be effective in preventing adolescent AOD use (NIDA 1985a; Blum et al. 1978; NIDA 1983; Schaps et al. 1981). Further, the vast majority of studies suffered from major methodological and design flaws, such as lack of a control group, or use of attitude outcome measures only, which made conclusive evaluation impossible (Goodstadt 1980; Schaps et al. 1981).

The most recent prevention orientation, the psychosocial approach, has evolved since the late 1970s. This model, which places primary emphasis on the psychosocial factors believed to promote the use of AODs, is rooted in social learning theory (Bandura 1977). It is assumed that AOD behavior, like any other behavior, is learned through a process of modeling and reinforcement and that consequently AOD use is prevented by teaching skills that reduce an individual's susceptibility to peer pressure to use AODs (NIDA 1985b, pp. 8-49).

Within the psychosocial approach there are two distinct models of prevention: the social influence model, and the personal and social competence model. These models differ in framework and in specificity of skills taught.

The social influence approach is rooted in differential association theory. It is based on empirical findings that suggest that peer and family influences are primary etiological factors in the initiation of AOD use (NIDA 1985c). Proponents of the approach also assume that the media exert a powerful influence on adolescent AOD behavior. Social influence programs focus on one or more of the following aspects:

- increasing student awareness of social influences to use AODs,
- teaching specific behavioral skills for resisting those influences,
- correcting perceptions of social norms, and
- increasing public commitment procedures.

The personal and social competence model incorporates social inoculation and refusal-skill interventions in a broad-based program designed to teach students how to deal more effectively with general life problems and with specific temptations to use AODs (Wills and Shiffman 1985, pp. 3–24). These broad-based programs have theoretical roots based largely on social learning theory (Bandura 1977) and problem behavior theory (Jessor and Jessor 1977). Proponents of social competence models contend that the social influence approach targets only the distal factors of AOD use and ignores important personality factors that make youth differentially susceptible to peer pressure to use AODs (NIDA 1985b, pp. 8–49).

The research on both psychosocial approaches is mixed. NIDA (1985c), in reviewing 17 social influence programs directed at smoking prevention, found only two programs with adequate methodology for evaluation. In those two studies the level of smoking among junior high youth was significantly reduced. Although the other 15 programs also generally found positive results, NIDA (1985c) concluded that even though some social influence programs seem to be effective, little is known about how, for whom, and why such programs work.

Most of the research on broad-based AOD use prevention emphasizes one or more of the following "life skills": decisionmaking, assertiveness, stress management, problem solving, social skills, and self-improvement skills. A number of research studies on life skills programs have demonstrated reductions in cigarette smoking. Alcohol use has been studied occasionally. Few studies have examined changes in drug use. Moreover, while smoking decreased and knowledge about the dangers of smoking have increased, the mediating variables such as locus of control, self-esteem, and self-efficacy have often not changed. This inconsistency raises the question why changes in smoking behavior have occurred. When such a situation occurs, the likelihood that the effects of the program will transfer to other settings is reduced dramatically because it is not known which aspects of the program are essential to the program's effectiveness.

NIDA (1985b), developers of one of the life skills programs, offered a number of recommendations for improving current knowledge about AOD use prevention programs. These recommendations included:

- evaluating the impact of prevention programs on AOD use;
- analyzing variables hypothesized to play a role in AOD use prevention;
- determining the extent to which prevention programs have utility for populations other than White, middle-class students (e.g., low-socioeconomic-status, ethnic/racial populations);
- identifying "active ingredients" or components of successful AOD use prevention programs;

- identifying factors associated with positive and negative program outcome;
- testing different AOD use prevention models and programs against each other to determine their relative efficacy and cost-effectiveness;
- developing procedures to ensure the successful implementation of these programs in nonresearch settings; and
- conducting large-scale clinical trials with a broad range of students.

In summary, although evaluation of psychosocially oriented prevention programs has been equivocal, AOD use prevention efforts directed at enhancing social and personal competence appear promising. One additional factor that may contribute to effective prevention programs is the broadening of the target behaviors. Jessor and his colleagues (Jessor 1982; Jessor and Jessor 1977; Perry and Jessor 1985) have been studying health-compromising behaviors for more than 25 years. Health-compromising behaviors (originally called problem behaviors) include alcohol, tobacco, and other drug use (ATOD), unsafe sex, unsafe driving, violence-prone actions, and poor eating habits. The incidence of these behaviors has been increasing over the past decade. Moreover, these behaviors covary; that is, the likelihood that an individual will engage in one of these behaviors is associated with an involvement in one or more of the others. From this perspective, prevention efforts *should* focus on lifestyle changes rather than on the prevention of individual behaviors. Focusing on one behavior at a time may be time consuming, economically wasteful, and potentially ineffective.

## Considerations in Designing an AOD Use Prevention Program

### *Understanding the Target Population*

Before a prevention program can be designed it is essential to understand the target population. Because the authors have experience working with adolescents, specifically seventh-graders, adolescents are used as an example throughout this section. Understanding the target population's level of development is critical. One developmental consideration is functional age (Schaie 1986), that is, the time when a cohort reaches a certain age or encounters a certain event that has explicit opportunities, expectations, and responsibilities. For example, at 16, youth earn the privilege to obtain a driver's license. Cohorts entering a particular grade level in school face new opportunities and challenges that set them apart from students in other grade levels. Prevention programs that are sensitive to the events relative to that functional age and make an effort to integrate these events into the program are more likely to have a broader impact on the target population.

Another important developmental issue is the cognitive and biopsychosocial maturational differences associated with chronological age. Without considering these factors an AOD use prevention program is likely to be unsuccessful. Many programs, for example, include an emphasis on consequence analysis—understanding the consequences of one's decisions. Lewis (1981) found that age is a relevant variable in being able to consider the future consequences of a decision. Further, as adolescents grow older they develop a goal-oriented perspective that lengthens the period into which goals extend and increases their ability to make plans for accomplishing the goal and to take concrete steps toward attaining it (Verstraeten 1980). Thus some activities often included in AOD use prevention programs, such as consequence-oriented decisionmaking, may require a level of cognitive development that preadolescents are unlikely to possess.

Cognitive development is only one aspect a prevention specialist must consider. Newman and Newman (1979) described a psychosocial stage theory of development based on five organizing concepts: stages of development, developmental tasks, the psychosocial crises, the central processes for resolving the crises, and coping behaviors. It was assumed that the psychosocial development taking place at any one stage has an impact on the subsequent stages. Newman and Newman (1979) attached developmental tasks (Havighurst 1953) to each stage. These tasks are a set of skills that are acquired as one gains mastery over the environment. In general, the tasks reflect skills necessary for motor functioning, intellectual development, social and interpersonal behaviors, and emotionality. Mastery of skills associated with later stages of development is enhanced by competency in skills that are acquired at earlier life stages.

As one progresses through the stages, certain demands or social expectations are placed on the individual by society. The effort to adjust to these demands is the psychosocial crisis. These efforts produce a state of tension, which provokes action. The action is the use of a set of acquired developmental skills. Successful achievement or learning of a task promotes happiness and suggests that the individual will likely be successful at accomplishing other developmental tasks. Failure to acquire skills necessary for successfully embracing a task can lead to personal unhappiness, societal disapproval, and difficulty in managing later developmental tasks.

For every crisis there is a difference between the level of skill of the individual and the expectations society has for skill performance. To resolve each crisis a different central process is required.

It becomes apparent that the issues adolescents face are not the same as those faced by young adults; in fact, the tasks, crises, and processes of early adolescents (sixth- to eighth-graders) are different than those faced by late adolescents (high school students). Some of the major developmental tasks experienced by early adolescents are acquiring physical and social skills, learning to evaluate oneself, learning to deal with and accept the rapid changes in one's physical and sexual development, and learning to understand the development of friendships and being part of a group.

Early adolescents encounter many life events that require effective coping skills. One such event is the opportunity for involvement in health-compromising behaviors such as AOD use. In a recent study of health-compromising behaviors conducted by Farrell et al. (in press), inner-city youth reported substantial experience with health-compromising behaviors such as AOD use, precocious sexual activity, and in delinquent behavior.

Johnston and O'Malley (1986) have surveyed the reasons adolescents report for using AODs. Two of the three clusters of responses that emerged from this research related to the decision to use AODs. They were a social or recreational factor ("to get high" and "to have a good time with my friends") and a factor related to coping with negative affect ("to get away from my problems," "to feel good," "to get away from frustrations," or "to relax and relieve tensions"). In other words, some students use AODs for social experimentation purposes; others use AODs as a means of coping with interpersonal and intrapersonal difficulties. Heavier AOD use was found when the AODs were taken to cope with negative affect. In developmental terms the reasons may have related to the tasks these adolescents were encountering, their environmental situation, their personality, or other factors.

The research findings of Johnston and O'Malley (1986) were consistent with the conceptual framework proposed by developmental psychologists who have studied drug use. For example, Kaplan (1985, 1986) proposed a self-derogation or self-rejection theory to account for deviant behaviors among adolescents. According to Kaplan (1985), adolescents initiate AOD use to overcome feelings of low self-worth. Other developmental psychologists who have studied the relationship between AOD use and adolescent development include Baumrind and Moselle (1985), Jessor (1982), Kandel (1985), and Newcomb and Bentler (1988). One of the major issues considered is whether AOD use delays or accelerates development. On the one hand, Baumrind and Moselle (1985) contend that AOD use delays the critical development of interpersonal skills and coping abilities. On the other hand, Newcomb and Bentler (1988) contend that as a result of AOD use vital developmental tasks are truncated, leading to premature involvement into adult roles or "pseudomaturity."

It can be concluded from a review of the literature on adolescents that the developmental changes adolescents undergo are significant. To assume that these adolescents are little more than passive receptors to be influenced by their proximal environment ignores, or at least underestimates, the impact of developmental changes (Silbereisen and Eyferth, 1986). Consequently, prevention programs directed at adolescents must consider the tasks being experienced as well as the environmental pressures encountered.

## *Matching AOD Use Prevention Programs and Target Populations*

One of the clearest statements about what type of AOD use prevention program is needed comes from the research of Newcomb and Bentler (1988, p. 234), who followed some 650 students for 8 years from junior high school to young adulthood. One of their conclusions was as follows:

> The typical youngster who has a beer or some marijuana at a party is not the one who is going to develop long-term damage as a result of their drug use. It is those teenagers who develop a lifestyle of drug use to relieve emotional distress and other life stressors (including the natural discomfort of adolescence) who will suffer long-term negative consequences of their use.... While peer pressure is an important and subtle phenomenon (e.g., Newman, 1984), that can no doubt have the effect of enhancing pseudomaturity as emphasized in our precocious development theory, it may not be destructive unless combined with psychological difficulty. The psychological causes for abuse of drugs are many, but can include emotional distress, lack of self-esteem, low self-efficacy, family problems, inherited vulnerabilities, dysfunctional coping styles, and other stressors faced by the teenager.

Given this perspective, our belief is that the major goals of AOD use prevention should be to delay onset of experimentation so that coping patterns can be developed to prevent continued use, and to teach life skills related to developing competence to prevent the psychological causes noted above from overwhelming the adolescent. There may be disagreement among researchers, prevention specialists, and policymakers whether "zero tolerance" is the appropriate goal for the intervention. However, there seems to be less disagreement that a major focus of the prevention program should be to enhance the adolescent's ability to gain competence in coping with the relevant developmental tasks and to deal more effectively with the life crises being encountered. A second focus is to teach prosocial skills for contending more effectively with environmental influences.

Two general frameworks seem appropriate as guidelines for developing AOD use prevention programs; the health promotion model developed by Perry and Jessor (1985), which is based on health promotion and problem behavior theory, and the life development intervention model developed by

Danish and his colleagues (Danish 1983; Danish et al. 1984), based on lifespan human development.

*Health Promotion and Problem Behaviors.* Problem or health-compromising behaviors occur at the levels of behavior, personality, and environment. Examples of effective preventions at the three levels might include smoking cessation workshops (behavior), reducing the tolerance to deviance (personality), and alerting individuals to the influence of negative models (environment).

Conversely, an effective prevention must also be designed to strengthen health-enhancing behaviors at all three levels. Examples at each level might include encouraging or teaching participants to engage in activities like exercise and hobbies, which fulfill psychological functions similar to those fulfilled by AOD use; strengthening one's feelings of self-control; and promoting exposure to influential role models who exhibit health-enhancing behaviors. Such a program must be comprehensive and intensive. A number of behavioral, personality, and environmental variables must be attacked. The unique aspect of this perspective is that there are health-compromising behaviors and health-enhancing behaviors, and both must be addressed. Further, the delineation of three focuses for prevention is an important concept.

*Life Development Intervention.* This framework is based on lifespan human development. Several of the assumptions of this perspective are as follows:

- Developmental change is a continual process, not limited to one stage in life.
- Change occurs in various interrelated social, psychological, and biological domains of human development, and therefore one must develop a program with a multidisciplinary, multidetermined focus.
- Change is sequential and therefore it is necessary to place any stage of life in the context of the preceding and following developmental changes.
- Changes in individuals must be considered in the context of the preceding and following developmental changes.
- Changes in individuals must be considered in the context of the prevailing norms of the day as well as one's present environment (Baltes et al. 1980; Danish et al. 1980).

Life development intervention has a life skills orientation (Danish 1983; Danish et al. 1984). The focus of life development intervention is on enhancing personal competence, which is defined as the ability to do life planning, to be self-reliant, and to seek the resources of others in coping. Developing personal competence involves having a series of skills, both interpersonal and intrapersonal. Interpersonal skills include the ability to relate effectively to others in a variety of different ways. Intrapersonal skills include the ability to set goals, acquire knowledge, make decisions, assess the benefits and costs of risk taking, develop self-control, and talk positively to oneself. Key to the framework is the ability to identify and set goals. Helping individuals identify goals and develop plans to attain them is an empowering act (Rappaport 1981).

Each of these frameworks seems to have considerable value for matching developmental level to a prevention program. Perhaps melding the strengths of both may be most effective. However, unless an explicit framework is adopted, the prevention may not be transferable.

## *Developing Effective AOD Use Prevention Materials*

In constructing an AOD use prevention program, the prevention specialist must become an educational technologist (Danish, in press). Decisions must be made about *what* is being taught and *how* it will be taught. Determining what is taught is directly related to the goals of the prevention program. The content of the program must be consistent with these goals. For example, if the goal is to strengthen students' ability to make effective decisions, it is necessary to teach the participants good decisionmaking skills. Too often the construct is not well specified, leaving the content of the program unfocused and the projected goals unattained.

While the question of how to teach the prevention intervention is related to the content, other "how" issues need to be decided as well. For example, teaching knowledge acquisition is different from teaching students new skills. Further, teaching problem-solving skills to 4th-graders is different than teaching them to 10th-graders. Finally, preparing materials for teachers is different from preparing materials for peer instructors.

Unfortunately, most program descriptions do not consider the prevention methodology in detail. Consequently, although *what* is taught may be described, *how* it is taught is usually not specified. For example, when a skill is being taught, a format consistent with "skill learning" should be used (Gage 1963; Gagne 1970). Such a format includes

- specifying an explicit goal or objective as behaviorally as possible,
- clarifying the rationale (understanding the importance) for learning the skill,
- presenting aspects of the skill sequentially so that the dimensions of the skill are known,
- modeling effective and ineffective examples of the skill,

- encouraging active participation and practice both during the training session and in the environment where the skill is to be employed, and
- providing immediate feedback about the appropriateness of the practice.

Without a carefully constructed technology a program cannot be replicated. What may happen is that, although a program is evaluated and found effective in the initial setting, it is found less effective when replicated elsewhere. What has generally occurred is that the program has not actually been replicated, because the format, target audience, instructors, goals, or other aspects of the program have not been specified clearly enough for replication to take place. A common problem is that the format and role of the instructor are not sufficiently specified and therefore effectiveness depends more on the charisma of the instructor than on the materials developed. For this reason, trainers' manuals are useful tools.

## *Understanding the AOD Use Prevention Setting*

Conducting an effective school-based prevention program requires more than a well-constructed program. The prevention specialist must be able to work with school-related groups such as administrators, school boards, teachers, parents, students, and the larger community. Developing an effective working relationship in the school setting is critically important in the success of the prevention program.

Before the program begins, the groundwork for conducting the actual program must be completed. In a school, for example, approval may be necessary by the administrator, the school board, or both. Writing a program description that emphasizes how the program will meet the school's needs is necessary. Equally important is convincing school personnel that the program will be valuable yet will not impinge significantly on their schedule. Many good ideas have gone unimplemented because the demands of the program required too great a commitment from the school and its students. The prevention specialist is a guest in a new environment and must be sensitive to this role. For these reasons it is often helpful to conduct a formal or informal needs assessment: Are there any indexes of AOD use and other health-compromising behaviors in the schools? If so, do the schools recognize the problem, and what is the best way to get them involved? Regardless of how much a prevention program makes sense, a community institution is not likely to participate fully in any program unless the program is in its best interest.

Obtaining permission to conduct the program is just the first step. If a system's authority is decentralized, it is necessary to sell the project at each level. For example, if approval is given by the school system administration, it is then necessary to gain the support of each school's principal and teachers.

It is also be critical to understand the calendar of the school, when statewide testing takes place, when examinations are given, and what the school norms are. Securing liaisons at different levels of the system is of tremendous value in understanding the system.

Seeking approval to work in a school to implement an AOD prevention program is an excursion into an ongoing system. The school must be prepared to be disturbed. Systems are more willing to adopt a program when they see the benefit of the program *for them* and when there is some indication that an ongoing commitment is being made.

Sometimes schools are not the best settings for AOD use prevention programs. For example, if a program goal is to involve parents, it is necessary to determine whether the school has a strong Parent Teacher Association (PTA). In many schools, parents do not become actively involved and PTAs are weak. Further, any prevention program must compete with other school functions. With schools being criticized for the failure to teach reading and writing, geography, science, mathematics, and foreign languages, many schools have returned to a focus on the basics. Thus, prevention programs are seen as less valuable and time is not being allotted for them. To have a school set aside adequate time for a prevention program during the regular schoolday is an accomplishment. If such a commitment is not made, alternative settings should be considered. Community organizations that involve students in after-school or summer activities should be considered, and they can be approached in similar ways. What is most critical is understanding the setting and the needs of the people in the setting. Without such an understanding, it is possible to design a prevention program that is unused or not transferable to other settings, or—even worse—an AOD use prevention program whose costs outweigh its benefits and the recipients are hurt rather than helped.

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# Evaluation of Alcohol and Other Drug Use Prevention Programs With Mexican-American Youth

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## Introduction

This section discusses how outcomes have evolved for two alcohol and other drug (AOD) use prevention demonstration programs in South Texas for Mexican-American* youth ages 8 to 14. The evaluation process required a delineation of obstacles arising from conditions and experiences with which Mexican-American youth must contend. Identification of obstacles helped clarify prevention content and delivery processes, which in turn pointed to more circumscribed outcomes than were originally conceptualized for the two demonstration projects.

The lack of well-drawn samples of Mexican Americans in studies of prevention effectiveness (NIDA 1987c) means there is little guidance available for selecting content and delivery processes or for specifying desired outcomes. Adopting a multivariate, high-risk-factors approach, Kumpfer (NIDA 1987b) provided a realistic but complex perspective in which AOD use is one of many potential behavioral problems faced by youth (Jessor 1987) and that may impede their maturation.

Although such complexity is realistic, it presents the prevention specialist with many choices of target groups, program content, and delivery mechanisms. Yamaguchi and Kandel (1984), among others, documented that early onset of AOD use correlates with longer use as well as with progressive or simultaneous AOD use. That current AOD use data for Mexican-American youth confirm clinical and community experiences of early onset of multiple AOD use patterns points to the need for early prevention efforts (NIDA 1987c; Texas Commission on Alcohol and Drug Abuse 1988; Andrew 1988).

The late elementary and middle school years, ages 8 to 14, cover a period of multiple developments all of which set the stage for development of individual identity and skill in self-control and social interaction. These youth receive less adult supervision and have available to them a wide range of activities and experiences that go beyond their maturational level. They also encounter more, and more diverse, youth both in and out of school, and, if they are successful, they undergo the transition from concrete to formal cognitive operations. This transition and the way in which a particular young person uses the dynamics of assimilation and accommodation (as identified by Piaget and Inhelder [1966]) can prove vital for resisting AOD use and seeking alternatives. Resistance skills, however, mean little if constructive and rewarding opportunities that the youth perceives as worthwhile alternatives are not provided. This chapter discusses several factors that seem to place Mexican-American youth at especially high risk for AOD use and their implications for prevention activities.

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* The Mexican-Americans referred to in this chapter refer to Americans of Mexican descent. They are a subgroup of the overall Hispanic population.

## Contextual Factors

### *History*

Mexican Americans in South Texas contend with a legacy of having been colonized not once, but twice. The subjugation of Mexico by Spaniards, and of Mexican landowners by immigrants to the Republic of Texas (Montejano 1987), set the stage for today's continuing economic and educational disadvantage coupled with social devaluation. Current demographics—exemplified by low median age, high birth rates, continuing immigration, and an increase in single-parent, female-headed households—suggest that historical inequalities will not change for many Mexican-American youth in the near future. If youth fail to become biculturally competent or to function appropriately in both the Mexican-American and the Anglo-American cultures, their future opportunities will become severely limited. Factors inside and outside the Mexican-American family and culture operate to retard the development of bicultural competence in youth. Processes operating in some families, in public schools, among peers, and in neighborhood settings suggest that prevention activities should foster the personal identity and personal skills of youth as early as possible.

### *Family*

The importance of the nuclear and extended family for Mexican Americans also presents potentially severe difficulties when that family constellation does not or cannot function well. Rothman et al. (1985) discussed the extreme vulnerability of the person alienated from or without family support. Figueroa and Oliver-Diaz (1987) identified the special risk faced by the young Mexican American from a family that is dysfunctional because of AOD use and has either weak identification with Mexican-American and Anglo-American cultures or virtually exclusive identification with one culture. Apart from AOD use and the extent of biculturalism, youth from families that cannot provide enrichment opportunities require external assistance.

## *Public School*

Many Mexican-American youth face the dual problem of poverty and cultural devaluation by the majority culture. A recent study (Corcoran 1988) documented the effects of decrepit facilities, limited supplies, inadequate personnel, and devaluation of students by teachers who have lost or never had optimism regarding the potential of Mexican-American youth. The considerable time teachers spend on control and discipline further detracts from a student-focused environment and from primary educational activities. A further step in cultural devaluation is the textbook selection process for social studies and history curriculum in the Texas public schools (Curtis 1988), which emphasizes particular interpretations of the past and present rather than presenting accurate facts.

Problems with public schools occur often enough to suggest that they are not the most efficacious settings for AOD use prevention activities. Schools certainly retain AOD education as a proper function, but the education function should not be confused with prevention activities, which concentrate on the personal and social skills necessary to avoid, reduce, or eliminate AOD use. Class size, the structure of the school day, the juxtaposition (at times) of school and family values, and the failure already experienced in elementary school by some youth work against effective delivery of personalized growth and development activities in the school setting.

## *Transition to Cognitive Operations*

The middle school and junior high school years present particular challenges to prevention program planners. As youth enter middle school, they should be in transition to the formal cognitive operations stage (Evans 1984) whereby critical assessment, abstraction, and decisionmaking become possible. The dynamics of this transition, along with other changes, may put youth at higher risk for problematic behavior. Youth mature at widely varying rates, and youth who have fallen behind by this point predictably face special difficulties adjusting to more abstract ways of thinking. As literal acceptance of rules from authority figures diminishes in importance, instruction in comparative thinking becomes critical. Prevention activities for this age group must encompass the range of cognitive styles present among program participants.

Entry into middle school may be accompanied by lowered self-esteem as youth are thrust into a new and expanded arena. Fu et al. (1980) reported lower self-concept scores for Mexican Americans than for either African Americans or Whites as early as age 10. If Mexican-American youth identify with majority culture role models as they enter middle school, additional self-concept difficulties may occur because of culture conflict.

## *Peers*

Although in middle school youth experience considerably larger school settings with a wider group of youth, after-school programs diminish at this time. Existing prevention programs tend to be loosely structured with little outreach to high-and multiple-risk youth. Thus, exposure to a larger number of peers with a greater variety of values and expectations for acceptable group behavior occurs at a time when parents are providing less supervision and are less able to screen peers or provide opportunities for structured activities outside the school setting.

The AOD prevention implications are several. There is a need for programs designed to increase youth contact with adults, to decrease unsupervised and unstructured time, and to reach out to peers who are not in the same classroom. The implication is that peer support groups are needed to counter informal peer group phenomena that place the youth at risk for AOD use and other juvenile problems.

## *Neighborhood*

Particular neighborhoods may have relatively specific characteristics that work for or against AOD use (Bell 1988). For example, in San Antonio a correlation has been found between interpersonal violence and the number of beer, wine, and distilled spirits licenses by census tract and police patrol district. San Antonio also has an institution called the "ice house"—a combined small convenience store and place where beer may be consumed on the premises. Because of the relatively mild weather, many ice houses provide outdoor tables where drinkers congregate. Although these facilities constitute informal social clubs for many adults, their high visibility and frequent use by youth makes alcohol consumption appear to many youth to be the norm rather than the exception.

Adolescents and young adults, mostly male, frequently congregate in parks and open areas. These areas, which might be informal recreation places for preadolescents, become unsafe when AOD activity occurs; parents often prohibit their children from frequenting these areas. When alcohol consumption in city parks is prohibited by city ordinances, it often moves informally to open lots or abandoned structures that youth must pass to reach the now-safe park facilities. Although parents and other adults have expressed concern, sustained local action to assure the safety of neighborhoods remains the exception.

The implications for preventing AOD use among youth in these neighborhoods are several. AOD use prevention programs offered through local institutions such as multipurpose centers and church halls, which residents of an area already frequent, may enhance participation by youth and assist in mobilizing neighborhood action to discourage at least public AOD use.

## Program Considerations

It has been argued that history, family, public school, peers, and neighborhood conditions all require programmatic consideration, for they may enhance or inhibit the effectiveness of AOD use prevention efforts. Despite the potentially negative situation described, prevention activities can be designed that anticipate one or more of these potential obstacles. Youth can also be helped to address most of these obstacles while realizing that no single individual can remove or change them.

## Outcomes

After the foregoing potential obstacles were considered, two prevention programs were designed for pilot testing in a demonstration project. Both programs seek similar outcomes but focus on the presumed needs of different youth. One examines the response of youth who are living with an AOD-using parent and compares them with youth who are not children of AOD users. The other examines the effects of parental involvement versus noninvolvement in the prevention program. Involvement levels are examined both for youth who report no previous AOD experience and for experimenters and regular users. The question is whether parental participation makes a difference for this age group and whether previous experience with personal AOD use influences program participation.

As originally conceived, the demonstration project would test the impact of changes in cultural awareness and self-concept with subsequent changes in intention to use, avoid, or eliminate AOD use in the course of the 3-year demonstration period. After considerable discussion at twice-monthly staff meetings, however, it was decided that the outcomes for both programs would include improved cultural awareness and involvement, because it was hypothesized that both contribute to positive self-concept. (Improved cultural awareness and involvement refer to knowledge, values, and behavioral skills [LaFromboise and Rowe 1983]. Bicultural involvement refers to the extent to which a person can and does participate in both Mexican-American and Anglo-American cultures.)

### *Cultural Preference*

The first intermediate outcome desired in the pilot project is improved bicultural competence. The issue of bicultural involvement becomes confusing if one uses the most popular measures of cultural preference (e.g., Cuellar and Jasso 1979; Olmedo et al. 1978; Perez et al. 1980). These instruments rate the relative preference of the respondent on a scale with "Mexican American or Hispanic" and "American or Anglo" as opposite poles. Thus Perez et al. (1980) reported that Americanized Mexican-American adolescents reported statistically higher rates of AOD use. An unfortunate interpretation of this finding argues that as youth Americanize, they also give up their Mexican-American identity. This interpretation results from the bipolar rating scale.

Szapoeznik et al. (1978) offered a concept and instrument in which separate "Hispanicism" and "Americanism" scores are calculated, allowing respondents to report their preferences on both dimensions separately and independently. A bicultural involvement indicator may also be constructed by comparing the subject's current practices with preferences if the subject could "wish" for change. Most items contain single words or short phrases, minimizing the need for an advanced reading level.

How rapidly one can expect cultural preferences to change poses a question for interpretation of the results. The study will document relative changes rather than basic change in position. It is anticipated that pretest will show some rejection of Mexican-American culture or, more important, low levels of involvement in both cultures, which Szapoeznik et al. (1978) labeled as "cultural marginality." The decrease in marginal scores in response to AOD use prevention program content and processes—which celebrate local Mexican-American history and Hispanic culture—and a relative balancing of Mexican-American and American preferences would represent positive movement. The underlying rationale argues that a person who expresses comfort in both cultures is better prepared to act appropriately and choose flexibly (La Fromboise and Rowe 1983).

## Positive Self-Concept

The second intermediate outcome desired in the pilot project—positive self-concept—is a more complex and elusive social construct than cultural preference. Positive self-concept does not imply a particular behavioral proficiency but may indicate that one person is more predisposed and open to learning different ways of thinking and new skills than another with low self-concept. Wylie (1979) reached rather pessimistic conclusions in the most thorough examination of this construct. Despite conceptual and psychometric difficulties, self-concept remains central to most discussions of late childhood and the transition to adolescence. Confused and conflicted youth should have either generally low self-concepts or self-concepts that vary in strength along such major dimensions as home, school, and peers. One issue concerns the strength or volume of experiences required to increase or lower self-concept as well as the length of time needed before such changes appear in self-report measures. The shift to a middle school environment and conflict in the family or difficulty at school have been cited as possible influences on self-concept.

Several widely used measures of self-concept exist. Most seem suited to structured classroom use because of their length and possible reading level difficulties. The Martinek-Zaichkowsky (1977) scale was used in the pilot project because it does not involve reading; the respondent selects from pen-and-ink drawings the one that is "most like me." A total self-concept score may be calculated. In addition, five subscales may be computed for satisfaction and happiness; home and family relationships and circumstances; ability in games, recreation, and sport; personality traits and emotional tendencies; and behavioral and social characteristics in school. These subscales include dimensions that the pilot programs attempt to influence. Of particular importance are the home and family and the school scales, which are posited as possible sources of confusion. The other three scales seem to be overall indicators of general happiness and satisfaction with self, and of general personal traits and emotional tendencies that may indicate the need for additional work with or later referral.

## Conclusions

This chapter has argued that AOD use prevention programming among Mexican-American youth must address a number of complex issues over which individuals have little immediate control. How successfully these issues receive attention in the design of AOD use prevention activities may influence significantly the outcomes that can be documented. Attention should be given to intermediate outcomes that may provide a basis for specific results. The intermediate outcomes of improved bicultural competence and higher self-concept are only two of a variety of outcomes that might be desired with youth exposed to multiple risks of AOD use. From this perspective, AOD use becomes one negative outcome among many that can delay effective maturation. Therefore, the ultimate outcomes of avoiding and eliminating AOD use remain better suited to longitudinal efforts that track the cumulative effects of AOD use prevention activities from preadolescence through early adolescence to the mid-twenties.

Sensitivity to contextual factors that may influence the design of AOD use prevention activities for Mexican-American youth also suggests an approach to selecting outcomes and indicators of these outcomes. The multiple factors identified in this document suggest that simple reliance on final outcomes such as avoiding, reducing, or eliminating AOD use will likely produce relatively little evidence of achievement. These outcomes remain important longitudinal goals, but reliance on them for the short term increases the risk that programs will claim successes with little evidence, or report lack of success, when in fact appropriate outcomes and measures for time-limited efforts were not established.

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# Designing Evaluation Models To Assess Primary Prevention and Cultural Change: An Evaluation Report of the Leadership Project

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## Introduction

In recent years, national attempts for aiding those who have been classified as "unhealthy" and "in need" have begun to take a new approach. Movement in the approach to mental health has been toward what some have termed "the fourth revolution." According to the report of the National Task Panel on Prevention, "This fourth revolution, if it happens, will identify society as a caring society—one that both holds out its hand to its unfortunate members and does all it can to prevent misfortune for those at risk" (Joffe et al. 1984). There is a growing recognition that mental health specialists can no longer focus solely on the remediation of existing illnesses; instead they must begin to prevent these "illnesses" from occurring (Guerney 1988; Goldstein 1984; Joffe et al. 1984; Lofquist 1983; Rosen and Solomon 1985).

Included among those illnesses or maladaptive behaviors that mental health specialists seek to prevent are those associated with the use and abuse of alcohol and other drugs (AODs). The past 10 years have brought a growing national awareness of the prevalence of AOD use in the United States. With national studies indicating that more than 90 percent of high school seniors have tried alcohol and more than 41 percent have tried marijuana (Johnston et al. 1991), it is becoming increasingly obvious that AOD use is a serious problem that needs to be addressed at more than just the remedial level. As Joffe and colleagues have suggested, society must show that it is a caring society that takes a deep interest in its young—reaching out to help them in need, supporting them in their health, and leading them toward a more healthy future.

With this sense of caring and hope The Leadership Project (TLP) was founded. With this dedication to the values of primary prevention its models were selected. And with the belief that in children lie all the strengths and weaknesses of the society as a whole, TLP has begun to address the problems of adolescent AOD use.

## Program Description

TLP is based in three target high schools in Windham County, Vermont: Brattleboro Union High School, Bellows Falls Union High School, and Leland

and Gray Union High School. The project concentrates on assessing a particular community's needs, desires, and strengths and is designed to

- promote positive relationships among segments of the community,
- create a greater awareness of AOD issues,
- assemble a team of adolescents and adults to begin to address the problem at the community level, and
- develop a structure and support system in the community so that current and future problems can continue to be effectively addressed.

The design is based on the philosophy that teens know at first hand the impact AODs are having on their generation; they want to improve the situation, and they hold the key to any truly effective program.

TLP is a team-oriented program based on the concept that adolescents can meet the challenge of AOD problems when support and encouragement are provided by a mobilized, aware, and active community including schools, agencies, parents, and concerned individuals. The need for such a broad-based approach is suggested by the research of Huba and Bentler (1982), who found that there are at least 13 different domains that influence adolescent AOD use. Included in these domains are intimate support systems (family, friends, peers), environmental stress, social expectations, social sanctions, and self-perceived behavioral pressure. This research, as well as research on primary prevention, suggests the need for a comprehensive program addressing a variety of variables at the community level.

### *The Staff*

Rather than viewing the project staff as the source of expertise, TLP serves as a resource that helps cultivate local interest and knowledge. Each community has a project coordinator whose functions are to

- build the project teams,
- activate the teams to begin educating and changing the community,
- network existing community agencies and organizations to build community strength, and
- develop the skills needed in the community to become more caring, more united, and more supportive.

### *The Clients*

The population that TLP targets, both directly and indirectly through the team concept, includes all adolescents enrolled in the target schools as well as the community that each target school serves. Teams consist largely of adolescents; the numbers of adult team members are limited to preserve equal partnerships between adolescents and adults (generally at a radio of 10 to 3). The program's philosophy is that all adolescents are at risk. Every adolescent is therefore identified as developing in a community where the intimate support systems, environmental stressors, social expectations, and social sanctions may be leading them toward, rather than away from, AOD use.

An early program goal was to recruit a team of adolescents that would be a cross-sectional representative sample of the target schools. Although the process was slightly different in each school, the overall process was to select several students from the student body, introduce them to the program, and ask them to select from a schoolwide attendance list a cross section of students who would most correctly represent all the cliques of the school. Each school attendance list was reduced to approximately 25 students who were personally invited to learn about the program and the role of the team. The strength of this approach was the sense of self-worth that each student felt from being recommended by some of his or her peers. Many students suddenly perceived themselves as leaders. Through this initial process and a series of interviews, 20 to 30 students were selected to become members of each "traveling" team. Others were invited to join the team as "home" members who did not travel to other locations.

Following the student selection process, each coordinator presented the TLP model to his or her school's faculty and encouraged faculty members to join the team. Lastly, coordinators were asked to recruit local community members and parents to serve on the team. Influential community members were identified by local residents and then contacted by the coordinators and the project director.

Following its dedication to primary prevention and the building of strong hosts, TLP began to reach out beyond the students attending the three target high schools to the broader community.

## Program Evaluation

### *The Design*

In developing an evaluation design, TLP has focused on the conditions in the community that lead to AOD use. Thus, the intervention meets the criteria for the community development approach to prevention described in detail in this section (Lofquist 1983).

Looking at the larger social systems, TLP is attempting to empower the three Windham County communities to define the problem of adolescent AOD use and target a goal—of a healthier community. Unfortunately, social science methods are by and large better suited to the traditional "silver bullet" approach—a single cause, a single cure. Newer methodologies better suited to evaluating the nature of community development prevention programs are less well known and understood. Researchers clearly agree that a greater effort must be made to develop effective strategies for measuring clear behavioral and attitudinal changes caused by primary prevention programs (Bond and Wagner 1988; Nathan 1985). For these reasons, TLP has carefully integrated two primary prevention models to create an innovative evaluation design.

TLP evaluation design began with the idea of understanding the nature of the program and clearly defining it as a primary prevention model. Using Lofquist's (1983) four-quadrant model of human service activity, evaluation staff identified the program's major areas of service as falling largely in the community development area (as is shown in the "Formative Evaluation" section). Lofquist defined the human service industry as falling along two continuums—purpose and focus. The purpose of the service ranges from remediation to prevention, while the focus of the service ranges from individuals to conditions. The quadrants, therefore, range from the prevention of conditions (community development) to the remediation of individuals (personal problem solving). Programs with a prevention focus tend to fall more into the community development quadrant than the personal problem-solving quadrant. If, therefore, TLP is indeed a primary prevention program, its activities must maintain the condition focus and the prevention purpose.

Once a clear model for identifying TLP as a primary prevention program had been selected, staff began to search for a model that would effectively measure change. Allen's (1986) Normative Systems Model for Organizational Change was selected. This model suggests that change can be measured through four developmental phases:

- In phase 1, the program analyzes the existing culture.
- In phase 2, new systems are introduced and employed by a select group who experience the desired culture.
- In phase 3, the systems implementation is broadened to begin modifying the existing culture.
- In phase 4, feedback about and evaluation of the new systems takes place in order to begin sustaining the desired culture.

It is believed that growth in the Windham County communities will occur in the four discrete but overlapping stages of this model. These stages will help to set time points for formative evaluation sessions and criteria against which progress and, ideally, causality can be measured.

The two models fit together quite effectively. Lofquist's model allowed the program to keep a strong prevention focus, and Allen's model allowed staff to look at the program in terms of what level of change had begun and what level of change needed to be addressed next. To graphically represent the progress of the program and clearly delineate to the staff their goals and successes, the two models were combined (see fig. 3). This model has been and will continue to be extremely helpful in setting strategies for both formative and summative evaluation sessions with the staff.

Allen Model

Lofquist Model

| **Activity level** | **Phase 1**<br>**Analyzing the existing culture** | **Phase 2**<br>**Experiencing the desired culture** | **Phase 3**<br>**Modifying the existing culture** | **Phase 4**<br>**Sustaining the desired culture** |
|---|---|---|---|---|
| **Community development**<br>Assessing<br>Planning<br>Educating | | | | |
| **Personal growth and development**<br>Skill building<br>Values clarification | | | | |
| **Community problem solving**<br>Reacting to a crisis-type situation | | | | |
| **Personal problem solving**<br>Individual counseling | | | | |

**Figure 3. The combined Lofquist-Allen model of developmental phases of primary prevention programs.**

## *The Method*

Based on the goals of TLP, both formative and summative evaluations were planned. The formative evaluations for the first year usually occurred quarterly; several extra sessions were held throughout the summer to set goals and timelines for the new school year.

The summative evaluation will include the preresults and postresults of the Primary Prevention Awareness, Attitude, and Usage Scale (PPAAUS), which was administered to all students in December 1987 and during May 1990.

Students on the teams were administered the Drug Knowledge Questionnaire of the National Institute on Drug Abuse (NIDA) and the Coopersmith Self-Esteem Inventory. Posttesting of these instruments was to occur in fall 1989. Success of the program would be shown by an increased level of drug awareness as well as an overall increased level of self-esteem among team members. Baseline data from schools were being collected and would continue to be collected at several intervals between year 1 and year 3. These data include AOD policies and their enforcement, dropouts, suspensions, and any events that are alcohol and/or other drug-related. A successful change in the school environment should show more clear and consistent AOD policies as well as fewer AOD-related incidents during school hours and after school events.

Data are also being collected from local police on all AOD-related arrests, cases of abuse, runaways, and domestic calls for minors and adults. Ideally, success of TLP would bring about a decrease in some of these statistics; however, reality indicates that such broad-scale changes will take many years. In addition, journals kept by staff, clippings of local newspaper reports, and editorials on events that may have an effect on the project (e.g., new agencies or projects, AOD-related political decisions, accidents, violence, arrests) will be used to begin to assess changes in the community.

Staff journals are being kept regularly. In addition to any thoughts the staff feel are important to enter, they are to make a special effort to enter specific notes on the environment, values, and characteristics of the community and schools to which they are assigned. In each instance they are asked to illustrate their opinion with facts and/or observations. These data will help to assess the "character" of the change and begin to document the changes in attitude that are less easily measured by hard data (Webb et al. 1981).

In addition, staff keep monthly reports that document

- the number of agencies networked and the nature of the contact;

- the number of students referred to remedial agencies or programs;
- the number of presentations made, including type, audience, and number in attendance; and
- the number of AOD-free activities sponsored or cosponsored, including type, audience, and attendance.

Throughout the collection of information for the summative evaluations, close attention will be paid to changes in AOD use among adolescents, the school environment, the community environment, the involvement of the program with other agencies and organizations in the community, and the nature of the team experience. This information will then be analyzed for the level of change that has been achieved according to Allen's model.

## Evaluation Results

Because TLP had been in operation less than 1 year at this writing, this section focuses primarily on the role of formative evaluation in keeping the program on track, identifying and resolving stumbling blocks, and measuring early program successes and failures. The role of summative evaluation at this point had been largely to gather baseline data and establish a clear comparison point.

### *Formative Evaluation*

In the formative evaluation, feedback was provided to project staff regarding their activities and the extent to which those activities were consistent with the program goals and objectives for primary prevention. Several evaluation sessions were held with the three coordinators from each school, the director of the grant, and the evaluators throughout the first year. The primary focus of these sessions was threefold:

1. To assess the progress of the program in terms of its philosophies and objectives. (Was the program on track in terms of its role as a primary prevention program? Were the stated objectives being met?)
2. To evaluate and clarify the role of the coordinators and to provide training when necessary. (Were the staff members clear about what they were doing and why they were doing it?)
3. To evaluate the development of the teams. (Were the teams being built? Were the teams really "teams"? What process was used to build the teams? What accomplishments had the teams made?)

*Keeping the Philosophical Focus.* One of the earliest stumbling blocks of the program was the development of a group of staff members who truly understood the meaning of AOD use prevention and the goals of TLP. To assist in this development, staff members were asked to read Lofquist's (1983) book *Discovering the Meaning of Prevention* as well as several other articles concerning prevention of AOD use. With this knowledge base, several evaluation sessions were held to discuss prevention, develop a clear distinction between prevention and remediation both in action and in theory, and assess where TLP fits in relation to the two concepts. Developing a clear distinction between primary prevention and remediation—and developing it early—quickly became the most challenging and crucial task of the formative evaluation. The goal was to allow the staff members to gain sufficient knowledge to begin making the connections on their own. Through this process, theories could become practice.

Subsequent evaluation sessions were devoted to ensuring that the theoretical course TLP had chosen was indeed being implemented. This purpose was accomplished by employing the combined Lofquist-Allen model. Each objective was evaluated in terms of the activities that had been used to accomplish it. The activities were then plugged into the model to determine what focus the program had actually taken and what developmental phase of change was being worked on (see fig. 4). As seen in figure 4, TLP did indeed spend its first year focused on prevention activities and the beginning phases of change.

*Making Sure the Objectives Are Met.* As well as having philosophical and theoretical objectives as a guide, program staff also had a specific set of goals and objectives outlined in the 3-year proposal. It became important during the formative evaluation sessions to go back to these objectives and assess where the program was and where it should be going.

To facilitate this process, coordinators were given an informal questionnaire on which to base a written year-end report. This questionnaire focused on the specific activities the team had projected to complete by the end of the first year:

1. Assemble teams of concerned individuals to act as agents of change.
2. Develop community recognition of the need for change.
3. Develop positive working relationships among those individuals with whom TLP will be working.
4. Assist community members, school personnel, and adolescents in designing programs that meet their specific needs.
5. Train interested adolescents as discussion group facilitators and workshop leaders.

Allen Model

Lofquist Model

| **Activities will take place on four levels** | **Phase 1**<br>**Analyzing the existing culture** | **Phase 2**<br>**Experiencing the desired culture** | **Phase 3**<br>**Modifying the existing culture** | **Phase 4**<br>**Sustaining the desired culture** |
|---|---|---|---|---|
| **Community development**<br>Assessing<br>Planning<br>Educating | • Initial assessment of Windham County<br>• Proposal writing<br>• PPAUS administration<br>• Kickoff day | • Assembly and training teams<br>• Community needs assessment<br>• Networking within the community (agencies, clubs)<br>• Family outing: Project Adventure/ Red Sox weekend<br>• Newsletter<br>• Guest speakers for courses | • Team presentations<br>• Dialogue nights<br>• Development of community advisory communities | |
| **Personal growth and development**<br>Skill building<br>Values clarification | • Staff training day | | • Introduction to "You've Got to Be Kidding" | |
| **Community problem solving**<br>Reacting to a crisis | | | • AOD-free programming<br>• Spring Fling, SADD and TLP awareness day<br>• Fundraising<br>• Student assistance | |
| **Personal problem solving**<br>Individual counseling treatment | • Coopersmith administration<br>• NIDA Drug Knowledge Questionnaire | | • Assisting schools with setting up support groups<br>• Student assistance programming | |

**Figure 4. Program and evaluation activities with the combined Lofquist-Allen model.**

Local recognition of the program is increasing, as evidenced by several articles printed in local newspapers, the appearances of team members and coordinators on local radio and cable television stations, and plans made for further press coverage. The program began in late fall 1988 with a community kickoff. An evaluation of this activity by all staff members showed that it lacked the organization and structure needed to make an impression on the community. The recommendation for this and other such activities is to either eliminate them or spend more time planning them. Priorities congruent with TLP's prevention goals need to be identified to determine what activities actually merit the time.

"Dialogue nights" were a more effective means of networking the project in the community. Several dialogue nights were sponsored by the teams throughout the school year. The teams were specifically trained to run these dialogues with adult community members, and topics focused largely on teen issues—anything from teen drinking to "living and loving." One of the most successful dialogues was sponsored by the Bellows Falls team for the local police. Both the students and the police gave the night very positive reviews and left with a greater understanding of each other and the issues that affect them. Other dialogues have been sponsored with school faculty, interested parents, and school administrators. These dialogues proved very successful and were to be continued throughout the second year with specific attention given to topics of local concern.

AOD-free programming has also been used to both increase local awareness of the program and begin to involve adolescents in more healthful activities. A number of programs were run strictly for the teams and team development (sledding parties, "Project Adventure" ropes course and initiative days, trips to baseball games, and so forth) while others were open to the community at large—dances, "Green-Up Day" to help clean the neighborhoods, Students Against Drunk Driving (SADD)/TLP awareness days in one school, and "Spring Fling" in another school. The Spring Fling provided a promising example, in one community, of the program's possible effects. In the previous several years, the Spring Fling had become more and more associated with heavy drinking. Many members of the school's administration had given up on the event and called for ending it. With the encouragement of the project coordinator and the support of the project team, the administration was convinced to give the fling a second chance. Hard work by both the adolescents and the adults on the team and in the school turned the 1989 Spring Fling into a community-building event attended by 200 to 250 students. Evidence such as this shows that TLP has done well in meeting its goal to have an impact on the community.

*Assessing Staff Development.* The increase in staff knowledge was significant. Evidence of the effectiveness of the training was shown in the staff members' movement from remedial to preventive activities.

In their 1988 year-end report, the coordinators were asked to analyze each training session. When asked to define the goals of the training they received, the coordinators articulated almost exactly the goals set out by the project administrators—evidence of the ability of the administrators to set a clear focus for the staff training. When asked how timely the training was, they all replied that much of the summer training should have come before they were placed in the schools. Lastly, when asked for their personal evaluations of the training, the coordinators were overwhelmingly positive in their reactions and recommended few changes. The evaluators recommended developing the dissemination model and a training model including a clear focus on primary prevention, the leadership role of the coordinator, and the role of the team.

*Establishing the Role of the Teams.* To examine the development and implementation of the team model, several approaches were taken. At the end of the school year, all staff were brought together in a formative evaluation session to discuss the team concept: was it working or did it need to be reevaluated? After lengthy discussion, the staff decided that the concept was indeed working but that there was a need for an indepth evaluation of team recruitment, training, leadership, and planning and goal setting.

*The Development of the Teams.* The coordinators' year-end report was used to assess the major focus of the recruitment process, the makeup of the teams versus the makeup of the schools and communities, attendance figures of team meetings and workshops, detailed descriptions of activities and discussions used to build the teams into a cohesive unit, and descriptions of how the teams were taught the concept of primary prevention.

Much of the information in these reports reflected the staff's commitment to the team model and their determination to revise it where necessary. All three coordinators agreed that the process used for recruitment (having students recommend other students and then having the staff contact students individually) was very effective in building a cross-sectional, representative team.

The methods that were used to build the teams into cohesive units, however, seemed to be a source of concern. All three coordinators felt that their training for this aspect was not as complete as it should have been (going back to the same issues that surfaced in assessing the staff). The biggest problem for the coordinators in this task seemed to have been gaining an understanding of their role in relation to the team. That is, were they to facilitate in a nonjudgmental manner, or were they to take a leadership role—creating change by guiding and leading? This issue surfaced during formative evaluation sessions. The administrators were then able to train the coordinators in leadership techniques.

In view of the relatively high attendance rates of 18 to 22 attendees per team meeting, the lack of clarity of coordinator roles did not seem to affect the teams too negatively. However, to hold the attendance figures for the second year, it was necessary for the coordinators to feel more comfortable in their role as leaders and give their teams a clearer sense of direction.

A survey also was sent to each team member. Included in the questionnaire were questions about perceptions of the program and its goals and activities, the cohesiveness of the teams, and the value of the team concept. Of 90 questionnaires sent, 30 were returned. One theme of the responses seemed to reflect the concerns of the coordinators and their role. Many team members were unclear about the specific goals of TLP and the philosophy behind them. With a more directed approach from the coordinators for year 2, this confusion was to be alleviated.

A second concern that surfaced in the survey was that such a diverse group of students and adults might never be able to get along and work together as a group. Through readings and discussions with a group dynamics expert, the coordinators were able to understand that such a belief would undermine the team model—that to believe two diverse groups cannot work together is to believe that one cannot build a community among peoples of various backgrounds. Further, the director was able to show the coordinators that the actions of the teams were evidence of a cohesive rather than a fragmented group. The coordinators' newly developed faith in their teams' potential could then be passed, through both actions and expectations, to the teams.

Lastly, some team members seemed to be concerned that TLP was "too much talk and too little action." Based on the lists of activities generated by the coordinators and administrators, there did not seem to be much merit to this complaint. This perception may have stemmed from the fact that a large number of team meetings were dedicated to training the group in the meaning of prevention; more concrete activities may need to be included to give the team a clearer understanding of the purpose of the training. It was anticipated that the balance between theory and action would be clearer in the second year, for the coordinators were now more secure in their understanding of the role of the team in the community and the teams had undergone much of the training that would be needed to implement the program goals.

The evaluators recommended that the administrators continue to affirm the importance of the team concept in the eyes of the coordinators and give the coordinators the skills needed to pass this belief on to the teams. A second recommendation, which was set in motion early, was to set the teams on a directive course, giving the members concrete tasks and letting them see through their work how prevention can bring about change. With the continued positive leadership of the director, the teams would continue to build on their role as effective change agents.

## *Summative Evaluation*

Because the program was still in its first year of operation at this writing, this section focuses on phase 1 (analyzing the existing culture) and some of phase 2 (experiencing the desired culture). Three instruments were employed during the summative evaluation process: PPAAUS, the Coopersmith Self-Esteem Inventory, and the NIDA Drug Knowledge Questionnaire.

*The Primary Prevention Awareness, Attitude, and Usage Scale (PPAAUS).* PPAAUS was administered to students in the three target schools in December 1987. All students who were present on the day of administration completed the questionnaire; approximately 10 to 14 percent were absent. One important goal of the program is to decrease the incidence of AOD use. It is hoped that data collected from this questionnaire will help to document this change.

PPAAUS was to be readministered to the same three schools in May 1990. Summative results will be based on a pretest and posttest comparison as well as an experimental and control group comparison. The control group comparison will be based on PPAAUS administered to other counties in the State of Vermont in 1986 and planned to be readministered to this same population in 1989.

*Coopersmith Self-Esteem Inventory.* The Coopersmith Self-Esteem Inventory was administered to project team members in December 1987. A total of 88 students and adult team members completed the questionnaire (see table 16 for results). A goal of the project was to begin to create among the team members the conditions that are most conducive to students' rejecting AODs. One important variable is self-esteem: Students and adults with higher levels of self-esteem are less likely to become AOD users. Team members will participate in activities to help increase their own self-esteem as well as receive instruction to help them increase the self-esteem of others. It is hoped that this questionnaire will assist in documenting a positive change in team members' level of self-esteem.

Team members showed generally high levels of self-esteem. The results may have been influenced by the fact that students were asked to put their names on the questionnaire. A second influence on the results may have been that all student respondents had been told they were there because their peers saw them as important leaders in the school—enough to temporarily increase anyone's self-esteem!

**Table 16. Results of the Coopersmith Self-Esteem Inventory**

| High school and team members | (*n*) | Mean* |
|---|---|---|
| Brattleboro | | |
| Adolescents | (25) | 30.1 |
| Adults | (6) | 32.33 |
| Bellows Falls | | |
| Adolescents | (22) | 30.8 |
| Adults | (6) | 33.67 |
| Leland and Gray | | |
| Adolescents | (20) | 29.15 |
| Adults | (9) | 33.05 |

*Of a possible 40

This questionnaire was readministered to the same adult and student team members in fall 1988. A pretest and posttest comparison will be made. No control group was tested in this case.

*NIDA Drug Knowledge Questionnaire.* The Drug Knowledge Questionnaire was administered to all student and adult team members in December 1987. A total of 88 team members completed the questionnaire (see table 17 for results). This questionnaire was used to help measure the project's goal of increasing knowledge of the effects of AOD use among team and community members. Team members were given training to help increase their understanding of the physiological and psychological effects of alcohol and various other common drugs. Because team members had used and would continue to use this training to make presentations throughout the schools and community, the assumption is that an increase in team members' knowledge will be followed by a natural increase in the community's knowledge.

This questionnaire was readministered to team members in fall 1988. Success was to be measured by an increase in the level of knowledge.

*Other Data.* Other baseline information that is being or has been collected includes the following:

- information from local police statistics (e.g., incidence of AOD-related crimes for adults and minors, numbers of domestic calls, incidence of reported child abuse, numbers of violent crimes);

- statistics from the three schools (e.g., dropout rates, incidence of AOD-related discipline, numbers of suspensions, school policies, current programs in school); and
- community information gathered from local newspapers (e.g., local issues, local attitudes on AODs).

**Table 17. Results of the NIDA Drug Knowledge Questionnaire**

| High school and team members (*n*) | | Mean* |
|---|---|---|
| Brattleboro | | |
| Adolescents | (25) | 13.8 |
| Adults | (6) | 18.33 |
| Bellows Falls | | |
| Adolescents | (22) | 12.57 |
| Adults | (6) | 18.0 |
| Leland and Gray | | |
| Adolescents | (20) | 13.05 |
| Adults | (9) | 16.11 |

*Of a possible 25

This information is being collected for precomparison and postcomparison at three time points: baseline, after 18 months, and after 3 years. Success of the program will be shown by a decrease in many of these negative factors.

## Summary

An evaluation model was developed for assessment of The Leadership Project. The evaluation model resulted from combining Lofquist's individual and community prevention dimensions with Allen's levels of change. The evaluation activities involved identifying program and assessment activities in each cell of the new matrix and involving the staff in the total process. This new model allows for an individual and community assessment as well as setting realistic expectations for outcomes as the program evolves.

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## CHAPTER 3

# Challenges and Solutions

## Introduction

OSAP staff recognized early in the initiation of the first grant program that grantees were facing many problems as they attempted to implement the goals listed in their contract proposals. The types of technical assistance requested and the questions posed for project officers indicated that grantees were encountering many challenges to their creativity, patience, ingenuity, and persistence. The sections in this chapter highlight the range of challenges, from lack of furniture to lack of trained staff, as well as methods to overcome them. Particularly useful for practitioners are the real-world solutions proposed by these now experienced leaders. This chapter is valuable for program directors who are considering implementing or attempting to implement services for youth in high-risk environments.

In a program that provided skills training and followup services for pregnant teenagers, Berger, Gendler, Corcoran, Sorensen, and Fitzsimmons identified barriers and solutions to reaching these youth. Their major focus was on retaining postpartum teenagers in the program. Lack of resources, lack of clear priorities, lack of support, and health problems were seen as major barriers. Case management, program flexibility, and the provision of resources were strategies successfully used to retain program participants.

Many grantees offered their programs through school districts and encountered unique challenges in that realm. Koenig encountered resistance to training even when teachers were offered the highest rate of compensation for their participation. She recognized that teachers today are faced with myriad expanding professional roles as well as normal family responsibilities. Consequently, the teachers were reluctant to become involved with anything that required additional time commitments. When the project staff presented their program to the teachers through another agency, however, interest was generated in participation in the more extensive training.

Borkman, Anderson, and Hamilton identified an inherent conflict between the needs of structured bureaucratic procedures and dynamic, evolving demonstration programs. These conflicts were apparent at the local level in staffing and at the highest levels in projecting activities 5 years ahead for a program that was changing daily. Constraints were also encountered in implementing prevention programs in systems that were designed for treatment services. This thought-provoking chapter is useful in planning for the interaction of complex bureaucracies.

Having a program and having others know you have a program are two different dimensions. Blotner describes her experiences with informing her constituencies (in this case a State network of university campuses) about special services available. Because each unit in the system was autonomous, each had to be approached differently. Others have encountered similar dynamics when dealing with school districts and community agencies (e.g., YWCAs), which are also autonomous units within larger systems.

Weaver and Young also encountered many challenges when they attempted to implement a consortium approach to alcohol and other drug (AOD) prevention. These innovators found themselves at odds with multiple bureaucracies and service delivery systems as they began to facilitate prevention, intervention, and treatment services for adolescents in high-risk environments. The problems of different accounting systems used by the various agencies resulted in substantial delays in service delivery. Difficulties in communication among agencies created many moments of confusion. This section should interest anyone who is planning comprehensive services in a community consortium context.

# Issues of Retention in Working With High-Risk Youth

*Candyce S. Berger, Ph.D., Beth Gendler, M.S.W., Jennifer Corcoran, M.S.W., Linda Sorensen, M.S.W., and Jack Fitzsimmons, M.D.*

## Introduction

Retaining youth in high-risk environments in special programs is a challenge to the professionals who work with them. There is a dearth of literature examining the problems of retention and strategies to combat them. Very little research has been done in this area to help practitioners deal with the frustration and difficulty of keeping youth in high-risk environments involved in services.

Project AFTER (Alternatives for Teens Through Education and Resources), a 2-year demonstration grant funded through OSAP, works with a subpopulation of youth in high-risk environments: pregnant adolescents at risk for alcohol and other drug (AOD) use. The project staff (the authors) have identified several obstacles to retention. This document identifies the key issues of these obstacles and the strategies used to overcome them. The first section of the document describes the program and its community context.

Although the authors have begun to delineate issues and identify strategies to overcome high attrition rates with special populations of adolescents, more research is needed to identify which strategies are successful in decreasing the obstacles faced by youth in high-risk environments.

## Program Description

### *Project AFTER*

Project AFTER is an AOD use prevention project for pregnant adolescents between the ages of 13 and 20 who are currently not using AODs and who are planning to parent. It is a joint project of the Obstetrics and Gynecology and Social Work departments at University of Washington Medical Center (UWMC) in Seattle, Washington. UWMC, the regional center for high-risk obstetrical care, delivers infants of more than 60 percent of the pregnant adolescents in the King County area.

The goals of Project AFTER are

1. to reduce the stress experienced by its high-risk participants;

2. to provide them with specific skills, information, resources, and support to prevent or decrease their AOD use; and
3. to decrease the likelihood of multigenerational cycles of AOD use.

The project uses a combination of three interventions: case management, AOD use prevention behavioral skills training, and parenting education.

The case management component begins when the client consents to participate in the project and continues up to 1 year postpartum. The case manager meets with the client twice monthly either on site or at the participant's home. This contact is augmented by telephone calls between visits. The case manager provides counseling, advocacy, information, referral to community resources, assessment, and education. The case manager facilitates attendance at agencies such as the Department of Health and Human Services as well as doctor's appointments by assisting with and providing transportation resources. The case manager provides the one-on-one relationship that remains constant throughout the project and reinforces information and skills presented in the behavioral skills training and the parent education classes.

The behavioral skills training component is based on the Alcohol and Drug Abuse Prevention Training (ADAPT) model, a community transition program for juvenile delinquents. The ADAPT curriculum was revised to be appropriate for the AFTER target population. The skills training is held in group sessions weekly for 9 weeks on site at UWMC. Each week the members learn a new skill and practice it using role playing, feedback, and videotaping. The skills taught include anger and stress management, impulse control, resistance to AOD offers, problem solving, and social networking. A workbook was developed, containing homework assignments for reviewing information and practicing the skills presented in the group sessions.

The parenting education component is an 8-week series of classes on site at UWMC. Participants come, with their infants, and may also bring a support person such as a boyfriend, husband, parent, or other friend. The parenting session includes a class on a different weekly topic, parent-infant interaction activities, home activity assignments, and individual time with group leaders and other parents for problem solving and support. The goals in the parenting component are to provide parenting knowledge and skills that meet the participants' needs, to help participants cope with life circumstances and planning, and to enhance teen self-esteem and confidence. Participants are again assisted by their case managers, who reduce barriers to group attendance and reinforce information provided by group leaders.

## *Staffing*

The multicomponent approach of Project AFTER necessitates a staff with experience in many areas. The project has several consultants who meet monthly with project staff to provide guidance and expertise in prevention curriculum, adolescent pregnancy, AOD problem prevention, evaluation, and data analysis. The project staff meet weekly for consultation and supervision. This variety of professionals with diverse theoretical and professional backgrounds allows the project to provide a comprehensive approach to serving its population.

## *Target Population*

Pregnant adolescents at risk for AOD use present a complex profile. The participants in Project AFTER had myriad problems that identified them as youth in high-risk environments. Of the 31 clients served, 19 (61 percent) were children of AOD abusers, 19 (61 percent) had been victims of abuse, 15 (48 percent) were school dropouts, and 26 (84 percent) were economically disadvantaged.

Early in the skills training, clients set personal goals. At this writing, many of these goals had fallen into four categories: more education and career development, expertise in parenting, a stable and healthy home environment, and healthy self-care habits. The clients, with the assistance of the case managers, have been able to set realistic goals, then break them down into concrete steps and work together to accomplish them.

In a study done by the Center for Social Welfare Research through the School of Social Work in 1986, 81 percent of the 10th-grade students sampled had used alcohol and 55 percent were current users. Twenty-nine percent of the same 10th-graders smoked cigarettes, 46 percent had initiated marijuana use, and 10 percent used marijuana daily (Catalano et al. 1987).

Although this study looked only at youth attending high school, clinicians in the field verified the widespread use of gateway and other drugs by youth out of school. Pregnant adolescents often fall into this category. There does seem to be a "honeymoon period" during pregnancy in which women may stop or decrease AOD activity: however, the stresses of adolescent pregnancy can also increase the likelihood of AOD initiation or continued use. Essentially, King County 10th-graders were quite similar to other high school students in their usage of gateway drugs.

In 1986, 1,400 young women between the ages of 10 and 19 gave birth in King County. Of these 1,400, 197 were already parents (Seattle-King County Coalition 1988). Although the adolescent pregnancy rate has been declining in the United States since 1970, the number of births by unmarried versus married teens is sharply disproportionate (Children's Defense Fund 1985). Furthermore, there has been an even greater increase in the number of births to poor teenagers in ethnic/racial populations.

In a survey done of resources for pregnant teens in King County, respondents indicated improvements were needed in several service delivery areas. Support services and AOD treatment for this population were seen as a top priority (Seattle-King County Coalition 1988). Another report looking at school and education in relation to adolescent parents emphasized the importance of completion of high school for this special population. Teenage parents lacking a high school diploma or a GED were at much greater risk of becoming or staying economically disadvantaged and also demonstrated a greater lack of self-esteem (Washington Alliance 1986).

The combination of AOD usage and pregnancy rates among this population necessitated developing a special program. Professionals in these fields are acutely aware of the problems associated with AOD use and adolescent pregnancy and have addressed the needs of these populations separately. Research has shown that children whose parents use AODs are more likely themselves to be users (NIDA 1985). Therefore it is imperative that this population of pregnant adolescents is reached before the legacy is passed on to another generation.

## Barriers to Program Operation

Retention of high-risk adolescents in any kind of program can present many problems and issues. The authors have identified several key areas that seem to affect an adolescent's retention in a demonstration project. At the time of this writing, the first phase of the project was in the implementation stage. Therefore, it is important to note here that retention is discussed in relation to the first phase of a multifaceted project.

The overall developmental stage of the adolescent is the key factor that influences his or her ability to make a commitment and stay with a project. Adolescent lives can be chaotic and disorganized and adolescents often lack the developmental ability to plan ahead and keep appointments (Catrone and Sadler 1984). The problem is even greater for many adolescents in the program who are involved with a number of agencies. Another aspect of an adolescent's life that can affect retention (in a program) is the lack of peer support for participation. At this stage of development, adolescents' peers are extremely influential in their lives. Without peer approval for involvement, an adolescent may find it difficult to make and adhere to a commitment.

### Lack of Resources

Even if they have their own means of transportation, participants in Project AFTER often lack money for gas and parking. More often, they lack transportation altogether. In addition, the majority of young women in the project are economically disadvantaged and therefore their resource needs are much broader, including food, clothing, and housing. Pregnancy adds another financial strain and often increases the need for resources as the adolescent must now secure the essentials not only for herself but also for her baby.

### Competing Priorities

One of the elements that lead to disorganization in adolescent lives is involvement in a variety of activities. Participants are sometimes unable to balance being in the program with other aspects of their lives. The most common competing priority is family commitment. Several of the participants in the project have the added responsibility of another child or taking care of the children of other family members, which makes followthrough even more difficult for them.

### Health Care Status

This factor is very important with a population of high-risk pregnant adolescents. Project activities are of secondary importance compared with prenatal or other health care appointments. In addition, pregnant adolescents are at higher risk for certain medical complications such as premature birth, high blood pressure, and low birth-weight infants (Coates and Van Widenfelt, 1991). These types of complications can greatly affect an individual's degree of participation in project activities.

Even without medical complications, the physical changes and discomfort of pregnancy can affect participants' energy level and mobility. These factors must be taken into consideration when planning project activities.

## Overcoming Obstacles

This section discusses strategies for eliminating or minimizing the obstacles that have been discussed, thereby increasing the retention rate of project participants.

### Case Management

The first strategy that seems to strongly reduce the dropout rate among the participants is case management. The case manager is a central figure in the pregnant adolescent's life, providing ongoing support during a stressful time, assisting her in securing necessary resources, and acting as a liaison to other agencies she needs to access. In addition, the case manager is instrumental in integrating the content of the AOD skills training and parenting with the participant's daily activities. This linkage is seen as essential. If the adolescent is unable to see the relevance of that content to her daily life, then interest and motivation to attend the group drop drastically. The case manager is able to help each adolescent identify individual barriers and find solutions that enable successful participation. This relationship becomes a constant in the participant's life despite the numerous other changes that may be occurring.

### *Program Flexibility*

The chaotic and disorganized nature of adolescent lives necessitates programming that can be flexible to meet the needs of participants. In Project AFTER, session times were set to accommodate participant needs. In addition, several group sessions were run simultaneously so that the participants could choose the one that best fit their schedules. A special prenatal clinic was set up to coincide with the session times, decreasing the number of trips a participant had to make to the hospital. Case managers were available to do home visits or, if the participant preferred, to see her outside the home.

Flexibility is a factor not only in the initial program planning but is also important throughout implementation. For example, originally all of the participants involved in the project were to receive their prenatal care in the UWMC system. Early in the project, however, this requirement was found to be too restrictive and participants were permitted to receive prenatal care anywhere in the community. Having the flexibility to change while the project is ongoing greatly increases the chances of retaining participants.

### *Providing Resources*

Project AFTER has provided bus tickets, parking passes, and gas money for transportation to group sessions as a way to minimize transportation strains. When there are no other alternatives, staff members transport participants to group sessions and to other appointments. Healthy snacks are provided at the breaks during group sessions, and case managers also assist in securing food if participants are in need.

Incentives may also assist in decreasing the dropout rate. Incentives provide a form of recognition that indicates to participants that the staff is aware of the commitment and energy they have put into the project. Project AFTER provides weekly incentives to participants as well as at the end of phase 1. At the end of each group session, participants receive a small gift (e.g., a free food coupon or a movie pass). After completing AOD use prevention groups, the participant receives a gift certificate that she can redeem on a shopping trip with her case manager.

### *Bonding*

Finally, a very important key to retention in the project has been an intensive introduction to the 9-week AOD use prevention behavioral skills training. This intensive session creates a new social network of peers to provide support to the adolescent. This meeting is 3 1/2 hours long and is designed to build trust and establish relationships among the project participants and with the project staff. Attendance in this session is a key to retaining participants. The majority of participants who have dropped out of the program did not attend the intensive session; instead, they started the behavioral skills training without the chance to build relationships and meet other members. At this time participants make a verbal commitment to the project, to staff, and to other group members. Incorporation of some type of formal intensive initial meeting into projects working with youth in high-risk environments is strongly recommended.

## Conclusions

Retaining pregnant adolescents, as well as other youth in high-risk environments, in programs presents challenges to project staff. The staff of Project AFTER encountered several major obstacles in attempting to keep pregnant adolescents committed to their 2-year demonstration project.

Barriers to retention were easily identified in phase 1. These barriers included, but were not limited to (1) lack of resources, (2) competing priorities, (3) lack of support by their social networks, and (4) health care status. The authors have been able to identify strategies that minimize these barriers and increase the chances of retention. These strategies include (1) case management services, which provide a special counselor to the adolescent throughout project activities; (2) program flexibility; (3) providing resources and offering incentives that are meant to recognize the participant's efforts; and (4) participation in a formal entry group, which serves as a forum for a participant's commitment to the project and as a time to build relationships with other project members and staff.

Identification of obstacles and the development of strategies to increase retention by adolescents in special projects is an important task during the first stages of program development. However, the chaotic and disorganized nature of adolescent lives sets the stage for noncompliance and attrition. It is important from the onset to develop realistic expectations and not be discouraged if retention becomes an issue. High-risk adolescents have difficulty following through with long-term commitments. Continuous examination of strategies and flexible programming must occur to address ongoing retention issues.

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# The Development of a University Early Intervention Program for Preventing Alcohol and Other Drug Use: The Challenge to Higher Education

*Roberta Blotner, Ph.D.*

## Introduction

The Federal Government continues to designate the curtailing of alcohol and other drug (AOD) abuse a national priority. In the higher education setting, many questions about the development of appropriate and effective programs to address AOD use and resulting crime are raised. The primary concerns of higher education institutions are to develop effective prevention and early intervention services and to coordinate with other agencies, media, and the private sector to provide a more organized approach to the problem. This document focuses on AOD use in New York City and the response of The City University of New York to these issues; it is probable that similar conditions exist in other metropolitan areas and that the approaches taken by The City University can be replicated elsewhere.

## Program Description

### *The Role of the University*

The City University of New York is committed to developing and implementing prevention and support programs directed toward AOD use and abuse. In 1986 the chairman of the board of trustees, in cooperation with the chancellor and the college presidents, initiated a drug education effort on behalf of the university. Priorities were established for education and prevention. Input was received from faculty, counselors, and students regarding the kinds of services needed. Educational leaders from public and nonpublic schools participated in planning meetings. A policy statement developed by the Council of Presidents Committee on Drug Education was ultimately adopted by the board of trustees. This policy asserted the need for prevention programs that would deter students from becoming involved with drugs, for procedures to assure the existence of drug-free campuses and a drug-free New York City, and for guidelines regarding the treatment of students involved in drug use and/or sales. It also called for cooperation among agencies in order to provide services more effectively.

The goals of The City University program are to develop comprehensive services for students and to establish collaborative relationships with the public and private school systems, the police department, unions, city and State agencies, and the private sector to develop a coherent, effective, and comprehensive approach to reducing and eliminating AOD use. Ultimately, it is believed, all the youth of New York City will be better served.

## *Target Population*

The City University of New York is the third largest university system in the country and the largest urban university. There are 186,000 students enrolled in its 17 undergraduate, graduate, and professional schools. The university draws its student population mainly from the five boroughs of New York City and reflects the city's economic and ethnic makeup.

Sixty percent of the university's students are from ethnic/racial groups. Approximately 33 percent are from homes where a language other than English is spoken. Many enter the colleges with some deficiency in academic preparation. More than 67 percent of freshmen require at least one remedial course. More than 40 percent of the students are from families with annual incomes below $12,000.

Many of the students were raised in poor neighborhoods pervaded by alcohol and other drugs. Often these students are struggling to rise above adverse conditions. They are determined to become educated and to gain access to greater economic opportunities for themselves and their families.

## *Community Context*

AOD use in New York City has been a severe and growing problem for several decades. According to the New York City Police Department, drugs proliferated in New York City in the 1980s. Narcotics arrests increased between 1980 and 1986 by 222 percent. Further, 80 percent of those arrested for felonies have been found to have cocaine in their urine. The proliferation of drugs in New York City can be attributed to many complex factors, including the increasing popularity of cocaine, the tacit decriminalization of low-level drug transactions, and the increasing number of illegal storefronts catering to every type of criminal activity. Further, in fall 1984, crack cocaine first appeared on a Bronx street. A highly potent, addictive, and inexpensive form of cocaine, it soon became a very popular and deadly menace.

Among youth the problem has reached epidemic proportions. According to the most recent survey published by the New York State Division of Substance Abuse Services (1984), AOD use among youngsters in New York City is widespread. Of a sample of 537,000 New York State students in grades 7 through 12, 48 percent had tried marijuana, 6 percent had used cocaine, 27 percent had used inhalants, and 63 percent had used alcohol during their lifetime.

College students constitute an at-risk population of AOD users as well. A national survey of college students conducted in 1985 indicated that 42 percent had used marijuana, 17 percent had used cocaine, and 92 percent had consumed alcohol in the past year. Although no specific data are available on AOD use among New York City college students, it is assumed that (as in other age groups) New York City exceeds the national average.

## *Student Assistance Program*

In its commitment to address the needs of its students, The City University had previously developed prevention and intervention activities such as courses to prevent AOD problems, counseling, wellness programs, and health-related conferences. However, these had been effective in reaching only a small number of the students in need of such services. Because of inadequate resources, they had not been implemented consistently and comprehensively throughout all the colleges of the university. Most of the population was left unserved. It had become imperative that all students, faculty, and staff at The City University of New York have access to prevention and intervention services. Plans were developed and funding sought to establish prevention and early intervention services on every campus.

The first major component to be implemented—an early intervention project—was funded by a 3-year grant from OSAP. These funds enabled the university to develop and implement a Student Assistance Program (SAP) on each undergraduate campus. SAPs identify high-risk students and provide counseling and referral to treatment or mental health facilities. These are the first prevention and intervention services to be offered universitywide.

Students with existing or potential AOD problems are identified through outreach activities offered by faculty, athletic directors, coaches, and security personnel. Once identified, students are referred to counselors who assess the problem, provide counseling, and, if necessary, refer the students for more extensive treatment.

During the first year of the grant period, the program structure was developed. The program was placed under the jurisdiction of the deans of student development, who also supervise counseling and health-related programs on each college campus. The deans selected teams of counselors whom they considered competent and committed for participation in the program. Although they were knowledgeable about students' problems, these counselors were less knowledgeable about AOD use.

Year 1 goals of the program were to provide training to counselors in AOD-related issues, to set up the beginning of a counseling program, and to make the college communities aware of the existence of this new program. Training sessions covered the following topics:

- an overview of AOD use,
- interventions with AOD users,
- techniques of assessing AOD use,
- techniques to motivate AOD users to stop using,
- special issues in counseling AOD-using students with AOD-abusing parents,
- referring students for treatment or other assistance,
- AOD dependency and culturally diverse populations,
- group discussion of individual college programs, and
- alcoholic family systems.

Because funds were available, supplies and materials were developed to supplement the training and to support the program operation.

After 3 days of training sessions, counselors met with colleagues from their respective colleges to develop a plan for each campus SAP. The purpose of the plan was to describe the activities each college would employ to fulfill the program mandate (i.e., identification, counseling, and referral) and to guide the implementation of the program.

For the remainder of the year, SAP teams began setting up and implementing their programs. The programs varied widely as teams determined the needs of their respective colleges:

- Several campuses developed and administered surveys to students and staff in order to better understand the nature of their local problem.
- Many campuses developed materials, flyers, directories, and bulletin boards to make students aware of the new services being provided by the SAP.
- On most campuses, workshops were offered to faculty and staff to sensitize the college community to the issues related to AOD use.
- On most campuses, college teams spoke to student government and leadership organizations to inform them of the programs and enlist their support.
- On all campuses, SAP teams began to develop professional interagency relationships by contacting treatment and mental health agencies.

During year 2 of the project, counselors would continue to receive training, and athletic personnel and security staff would begin their training. Training sessions for those groups would include such topics as

- recognizing signs and symptoms of AOD use,
- approaching students suspected of having AOD problems, and
- making referrals to college SAPs.

In year 3 it was expected that additional groups of faculty and staff would receive training in identifying students with suspected problems and referring them to SAPs. It was expected that at the end of the 3-year grant period, SAPs would be fully operational and would be counseling and referring students. Faculty and staff would have developed skills in recognizing students with problems, in knowing how to approach high-risk students, and in guiding the students through the SAP.

## Challenges

Establishing a comprehensive AOD prevention and early intervention program for a university is a tremendously complex process that requires commitment, resources, and coordination. During year 1 of the program, significant progress was made in establishing quality programs. At this writing, the programs were still evolving, however, and a number of major goals must be accomplished for the program to be effective.

### *Autonomy Versus Collaboration*

The program is an innovative one for The City University. In most cases, the colleges operate as autonomous institutions with differing needs and independent programs. It was determined by the chairman of the board of trustees that AOD prevention and intervention programs would be universitywide, involving the participation of all the colleges. Only support at the highest levels of the university (i.e., the chairman of the board of trustees, the chancellor, and college presidents) made it possible for such a program to exist. For the program to succeed it was necessary to provide a university-wide structure, which required that each college give up some autonomy. At the same time it was also necessary to accommodate the individual needs of each college. This balance has been, for the most part, achieved. Each SAP is different and reflects the needs of its respective college.

### *Staff Time*

Although counselors were asked to participate in this program, they were not relieved of any other responsibilities. There were no resources to hire new staff who could be assigned full time to the program. The SAP, therefore, had to compete with established counseling and academic programs for staff hours. This requirement has presented a major obstacle for program implementation. It is crucial that in the future adequate funding for staffing be available for program development.

### Denial

Alcohol and other drug use is as difficult and sensitive an issue for institutions to address as it is for individuals and for families. Examining the issue forces the institution to confront problems that are difficult and painful to accept. Denial and resistance were obstacles that needed to be addressed during the initial phases of the program. While there is no evidence that AODs are very prevalent on The City University campuses, students come from every neighborhood in New York City. The widespread availability of drugs in New York City puts college students at a particularly high risk of becoming involved with drugs. Many pass drug dealers while traveling to school and have friends or relatives who have been involved with drugs. During the training sessions, counselors and staff began to examine closely the field of student AOD use and confront the extent of the problem on their campuses.

### Changing the Status Quo

On many campuses, the established policies in dealing with students who were identified as having AOD problems were punitive and resulted in disciplinary actions. With the development of the SAPs, however, the goal became assistance to students with problems. Counselors, in some cases, found themselves in conflict with traditional campus policies. As a result, colleges had to reexamine and redefine their policies on AOD use.

### Outreach, Recruitment, and Publicity

The City University is a commuter school. Students attend classes, meet with faculty, participate in club activities, and then leave campus for a job or other responsibilities. Unlike students of residential colleges, these students spend comparatively little time on campus, a fact that presents special difficulties for the SAPs. Outreach and recruitment efforts must be devised to reach this elusive audience.

Although the core group of SAP counselors is working hard to establish effective programs, the vastness of the university community makes an awareness of the program among faculty, staff, and students a formidable goal. During year 1 of the program, counselors created fliers; made announcements at faculty meetings, on campus radio stations, and in newspapers; sent memos to deans and other administrative officers; spoke to selected classes; and attempted other forms of publicity. The university received a grant from the Metropolitan Life Foundation to develop a poster announcing the program for display on every campus. Still, the programs suffered from a lack of awareness. There is a real danger that some students who may be in trouble with AODs may not find help through the SAPs. It is hoped that, with time and effort, students and faculty will spread the word.

## *Lack of Prevention Services*

During the implementation of the SAPs, faculty and administrators at the various colleges began to acknowledge the need for prevention services on campuses. Every student must be served, through AOD problem prevention and education, counseling, peer counseling, and other support services. Students can be best served by a professional and well-trained staff, and by having access to the most up-to-date information, materials, and technology. To provide the necessary services, increased resources must be made available from the Government and private sectors.

## *Coordination of Services*

*Community Agencies.* The City University's prevention and intervention programs do not exist in isolation from the larger society. The SAPs can only be as effective as the facilities in the community. Community agencies and treatment and mental health facilities were to play important roles for the university program by serving as an educational resource, by offering workshops to students and faculty, and by providing treatment and evaluation services to students referred by the SAPs.

In the initial phases of program development, SAP counselors began reaching out to and forming linkages with local agencies. Attempts were made to develop cooperative relationships in which students would receive priority for treatment. However, because of waiting lists at many treatment centers, it was very difficult to arrange priority placement. As more contacts were made with these agencies, counselors began developing relationships with treatment staff and expanding potential resources.

The City University intends to make this program a part of the larger network of services being provided in New York and across the country. To this end, the program administrators have been meeting with officials from Government, community, and private organizations.

*Police Department.* The university will be discussing a plan with the New York City Police Department to increase police presence in a two-block radius of the perimeters of the college campuses. This presence will enable students and faculty to travel to and from campus without being accosted by drug dealers.

*Public Schools.* Despite the wide array of services that are being provided in the public schools, school districts have continued to express a need to expand and supplement those activities. Additional training for school personnel is a key to accomplishing these objectives. The university plans to offer expanded training to school counselors. John Jay College of Criminal Justice already offers training to professionals from several fields, including social service workers, police officers, and educators. For those who wish to pursue alcohol studies as a profession, the program leads to a credential in alcoholism counseling, which is offered by the State Education Department.

*Private Sector.* A crucial resource in the fight against AOD use is the private sector: the media, the sports and entertainment industries, corporations, and businesses. Their stake in a drug-free city is obvious, for their success depends on a productive, healthy, and safe work force. Although they have the resources to help, they often do not know how best to use them. They have also, in some cases, been reluctant to get involved with Government agencies. It is believed that the university can serve as a conduit through which innovative partnerships with the private sector can be developed.

For example, one project was recently initiated by The City University in collaboration with a local television and movie producer whose sense of social responsibility led him to become involved in the field of AOD problem prevention. Together, audiovisual materials will be developed for schools and colleges as an enrichment to drug education classes.

## Conclusions

Institutions of higher education can make an important contribution to ameliorating the drug problem. They have access to expertise, community agencies, schools, businesses, and other organizations, and could be at the forefront in coordinating the efforts of these agencies.

During the past year, The City University of New York has undertaken a major initiative to address the problem of AOD use in New York City. With assistance from OSAP, the university is developing a significant early intervention program. This program has served as an incentive for each college to develop more extensive programs on its campus and has involved the university in a vital role in the wider community of the city.

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# Innovation and Bureaucracy at Odds: Consternation and Resolution

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## Introduction

In 1987, OSAP funded a number of demonstration grants in an effort to reduce alcohol and other drug (AOD) use among youth in high-risk environments. The Sociology Department and the Center for Health Promotion at George Mason University, Fairfax, Virginia, developed a grant proposal together with the local Fairfax County agency for Substance Abuse Services (SAS).

Part of the rationale for this interdepartmental and interinstitutional approach was to demonstrate that a collaborative team effort could be effective in addressing a timely social issue such as youth who use AODs. The theme of "linkages" permeated the initial proposal—linkages between youth-in-need and services, between community service groups and youth, and between the university and the local service agencies. The OSAP grant was awarded to the university and funded for 3 years.

This section of the monograph addresses some key issues involved in implementing a new and innovative program in a bureaucratic environment. It is a case study of the "Each One-Reach One" AOD use prevention program, developed from the perspective of the authors (the three principal project staff members at the university). A case study of this program from the perspective of SAS would probably be somewhat different.

## Program Description

### *Each One-Reach One Program*

Each One-Reach One is designed to bring together various components of the community to reduce AOD use among youth in high-risk environments. It is designed primarily to identify and intervene innovatively with youth at high risk for becoming AOD users. The primary objective is to develop AOD-free peer networks.

This prevention program is innovative in five ways. First, many youth prevention programs are school based, but this one is not. A review of the evaluation research on the effectiveness of school-based prevention programs concluded that the evidence of their effectiveness is at best mixed (Farquahr et al. 1987). Therefore the authors decided on a community-based program.

Second, the program applies and tests several principles of self-help groups among adolescents that have been demonstrated to be effective with adults. These include developing long-term AOD-free peer networks (like Alcoholics Anonymous) and using the helper-therapy principle. The helper-therapy principle states that those who reach out to help others are themselves helped. Third, outdoor adventure activities analogous to Outward Bound are used to develop skills and cooperation among the youth. Fourth, adult community groups are encouraged to become involved as sponsors, supporters, or volunteers. Finally, the program is innovative in that the above-mentioned elements, each one distinctive in itself, are combined in a new way.

Four operational goals were identified for this innovative project:

1. To build a communitywide peer referral, intervention, and support program for youth in high-risk environments.
2. To enhance primary prevention efforts for identified youth in high-risk environments.
3. To involve the community in a way that would promote the continuation of the effort.
4. To conduct formative evaluation measures to determine which programmatic elements are successful.

The specific plan was to begin with a highly visible, attractive adventure activity in a local regional park (Hemlock Overlook, administered by George Mason University). The park has a "ropes course," which is a variety of obstacles and challenges requiring modest physical activity as well as collaboration and cooperation to resolve—like getting a tire over a pole or getting all members of a group over a 15-foot wall. This activity has been popular with youth in the school setting, and the program is using it as an entry point into the ongoing positive network activities.

All of the youth are involved in this outdoor recreation experience, which promotes teamwork and creative problem solving. Not only does the ropes course enhance individual self-esteem, but it also provides positive AOD-free alternative activities for the participants. The outdoor experience is followed by several hours of discussion to complete the day's activities.

Subsequently, these individuals (the "each ones") are asked to invite others who they believe are at risk for developing AOD-using behaviors (the "reach ones") to participate with them in a full-day session of the ropes course. The each and reach ones gain insights about themselves and about human relationships and leadership, and they are actively encouraged to participate in a drug-free peer network. The staff provide information about the risks of AOD use, their own specific risks, and strategies to manage them.

Ongoing rap groups, recreational activities, and educational programs are then offered regularly and provide a foundation for the continuation of the peer networks.

There is also a role for the community to provide ongoing support. Members of community organizations (civic, religious, service, parent, youth-serving, and business) can be supportive with respect to financial issues, expertise, time, and referrals. Community volunteers are encouraged to develop projects with the youth or to "adopt a network."

### *Staffing*

The staff for the Each One-Reach One program come from a variety of agencies. First, the management staff from the university includes two principal co-investigators and the project director. Second, also from the university, is the evaluation staff, consisting of one of the principal co-investigators and three graduate-level assistants. Third, SAS provides the administrative oversight of two professionals as needed, at no cost to the program. Fourth, SAS hired two full-time professionals to interact directly with the youth and their parents. These personnel were hired through the county personnel process based on job classifications that already existed but with position descriptions developed specifically for the unique nature of this project.

### *Target Population*

The target population in youth ages 13 to 18 from a number of high-risk categories. Linkages with school suspension programs for AOD problems and early intervention programs are providing youth who show such high-risk factors as having been suspended from school, having attempted suicide, having engaged in delinquent behavior, being children of AOD abusers, and having experimented with AODs. Linkages with community recreation centers in the less affluent sections of the county provide a pool of ethnic/racial youth and economically disadvantaged youth. For example, of the first 48 youth who entered the program, 73 percent were from ethnic/racial populations, particularly African American.

### *Community Context*

Fairfax County, in Northern Virginia, is an affluent suburban county in the Washington, D.C., metropolitan area. It is one of the fastest growing counties in the United States, with nearly 700,000 people residing in the 400-square-mile area. It operates much like a city with a variety of service departments and administrative offices. The population is predominantly White with high educational levels and has one of the highest median family income levels of any county in the United States. There are, however, areas of poverty and concentrations of ethnic/racial populations, especially African Americans.

The adult population targeted for the community outreach portion of the project includes a variety of existing natural support mechanisms. Among these are community service organizations (e.g., Lions Club, Rotary, Civitan), civic and neighborhood associations, religious organizations, parents groups (e.g., Mothers Against Drunk Driving), youth-serving organizations (e.g., Boys Club, Red Cross, Girl Scouts), and businesses (the private sector). This targeted community population was seen to be a valuable asset for the program's ongoing activity, as well as an alternative source of funding for programmatic activities.

Although there are no data available on the AOD use of the target population, information is available on older youth in the area. The two principal co-investigators were involved with a campuswide survey on the university campus during the first year of this project. That survey assessed the AOD practices, perceptions, and knowledge of students on the campus and showed that overall AOD behavior was lower than the national average. Alcohol use was found to be comparable with the national average for college students. The perception of problems associated with alcohol use was viewed by the respondents to be low, and awareness of resources was relatively low. Noteworthy among the findings was that students viewed peers as their most valued referral resource and that positive peer influence was deemed the most effective "program."

## Barriers to Program Operation

In this section, the barriers to program operation are explained in terms of four themes:

1. The problematic local bureaucracy.
2. The interface with the Federal bureaucracy.
3. Implementing a new program within a bureaucratic triangle: the grantee university, the county contractor that would operate the prevention services, and the Federal grantor agency.
4. Developing an innovative prevention program in a treatment context and orientation.

The four themes are presented separately for analytical neatness, but in practice they often intersected.

## *Theme 1: Conscientious People, Problematic Local Bureaucracy*

The county staff overall were conscientious people trying to get the job done. In fact, the director of SAS was a professional friend of the authors'. This association facilitated county-university relationships, especially in times of conflict.

Many bureaucratic obstacles that were encountered in trying to start up the program were also experienced by the county staff. They had additional bureaucratic units and regulations within which they worked.

Much of what the authors have recounted about bureaucracy has been experienced by most program managers and staff but bears repeating. Two specific examples illustrate the theme of the problematic bureaucracy.

*Hiring Staff.* The county staff-hiring process is done by a personnel agency separate from SAS. At the outset of the project, the SAS director estimated hiring time at 8 weeks, a time period viewed as lengthy, but tolerable. The actual process took from 4 to 6 months. The SAS director, who worked closely with us, complained that even she had little influence to hasten the hiring process.

The long delay in hiring the intervention staff slowed down many other aspects of the project. Detailed planning of the intervention could not be done until staff were hired. Procedures and forms could not be developed for the intervention. Moreover, the formative evaluation research that was being done at the university was delayed because its detailed planning was contingent on the specifics of the intervention.

*Finding Space.* Obtaining rental space for the intervention program was a similarly long, arduous process given the contractual, financial, and programmatic restrictions. Many landlords would not accept a lease with the required contingency clause that would automatically break the lease if grant funds were discontinued. The 6 months it took to obtain a rental space and ready it for occupancy were problematic. The first county staff members were available to work 2 ½ months before the space was available. The county staff crowded in with another county intervention program to share space and referrals.

With both of these examples, as with other less significant ones, conversations took place regularly to share perspectives and concerns. The university called meetings once or twice a month to examine overall goals and progress. At each of these meetings the rationale for delays was clearly explained and understandable.

## *Theme 2: A Demanding, Uncertain Federal Bureaucracy*

In addition to the regular quarterly reports and the reapplication for the continuation years, OSAP imposed two sets of paperwork requirements: Goals, Objectives, Activities, and Milestones Statements (GOAMS) and Management Information Formats (MIF).

For each goal stated in the GOAMS, detailed objectives are listed under which activities with numerical targets (where possible) are to be provided. Each of these items was to have a scheduled date of completion and an actual date of completion. GOAMS took up an inordinate amount of time among the top administrative staff, time that had not been planned for in the application. Because the project proposal had underestimated the time needed for administration to begin with, the GOAMS requirements exacerbated the already tight situation.

The most serious consequence was the delay in other project activities owing to the amount of time spent on GOAMS. It was estimated that 10 percent full-time equivalent (FTE) of a top administrative person was spent on GOAMS during the first year. The principal co-investigator who handled the computer work for GOAMS was also scheduled to take the lead on contacting adult groups (civic, religious, service) to develop community support for the project. This activity was to be initiated during the first year of the project. Because of the extensive time taken with GOAMS, very little time was available for community contacts. Almost no community contacts of adult groups were made during the first year of the grant.

The MIFs asked for standardized information about such things as number, characteristics, and risk factors of participants served, number and disciplines of staff, and the number of events and attendees of public education and training sessions. Some grantees, including this project, were invited to participate in developing the MIF requirements. The principal co-investigator directing evaluation research and the project manager (clinical expert) spent several days critiquing drafts of forms and offering suggestions about how the desired data could be formatted and defined without seriously compromising the programs.

Designing a data collection system that incorporated the MIFs and the other program needs was a formidable and time-consuming task. The system had to provide (1) data elements required by the MIFs, (2) information that was programmatically useful to the intervention staff, (3) a system that did not interfere with the program staff working with youth, and (4) ongoing evaluation information for feedback on how well the project was accomplishing its objectives. Probably 10 percent of a senior researcher's time was spent in developing and testing the MIF system.

## *Theme 3: A Bureaucratic Triangle*

Periodically, competing expectations and standards of the local and Federal bureaucracies created dilemmas. One significant example illustrates this clearly.

Two sets of Federal regulations concerning AOD abuse clients and research demonstration projects intersected to create a "Catch 22" situation. The county demanded that an interagency agreement be signed in which the university agreed to follow the Federal confidentiality laws regarding AOD abuse clients. The university official would not sign the agreement until the project had passed through and been approved by the university's Human Subjects Review Board (HSRB) process. (The Human Subjects regulations were Federal rules regarding research and demonstration projects.) The HSRB process was delayed because the consent form that contained the confidentiality and Human Subjects guarantees had to be revised and approved by both parties.

There was several weeks' delay in redesigning the consent form. The approval process took additional weeks because it had to go through two bureaucracies, each with its chain of command. The effect of this Catch 22 was a significant delay in the work of the evaluation research team at the university and a delay in getting MIFs to OSAP.

The more serious consequence of the delay in receiving the data forms from the county was the impediment to the evaluation research team. Without the final version of the consent forms and the receipt of some completed data forms, the coding systems could not be definitively devised. Without the coding systems, no data could be entered into the computer and compiled for MIFs or any other purpose.

## *Theme 4: Clashing Prevention and Treatment Orientations*

The fourth theme involved the clash between the prevention orientation required for the project and the treatment orientation of county personnel and their bureaucratic procedures and regulations. Prevention programs in the community require different assumptions, orientations, and processes than treatment programs, but there were persistent biases toward treatment among county personnel, bureaucratic regulations, and procedures.

The county SAS personnel that worked on the project had been trained and had job experience primarily in treatment, not prevention. They were bright, resourceful, compassionate, and very competent in providing AOD treatment services, especially for adults. Nationally, the AOD treatment of adolescents is newer, is on a less solid research foundation, and has fewer years of experience and less training behind it. In general, less is known about treating adolescents with AOD problems than about treating adults. The national situation was clearly replicated in the county situation.

Prevention is even less well established than treatment. Many activities that have been labeled prevention were school-based information or educational efforts. Prevention is often under a basic model of "education," in contrast to a "treatment" model. Thus, prevention staff inform and educate voluntary participants, who often are not called clients. The target of prevention efforts is often the public at large or a segment of the public, such as youth in high-risk environments. The educational model implies more classroomlike involvement than a treatment facility (inpatient or outpatient) in which professional counselors have one-to-one relationships with clients. Table 18 lists the characteristics of prevention and treatment that led to clashes in the Each One-Reach One program.

Prevention is well understood in both the public health and the AOD abuse fields to be a continuum along which individuals have varying but increasing risk for developing a disease or health condition. At the extreme left of the continuum is primary prevention, which is undertaken for persons who may be at high risk but show no characteristics of the disease/condition. Midway is secondary prevention, which applies to people who may have behaviors associated with the disease or early symptoms of the disease. At the extreme right of the continuum is tertiary prevention, which is to help arrest an active disease process so that it does not worsen. Tertiary prevention is also known as treatment.

There were inconsistencies in the original application. On one hand the basic program was conceived as primary prevention. But on the other hand, the original idea was (for practical reasons) to use the county's adolescent programs, and most of those adolescents were in treatment. When planning, the county managers maintained that adolescent treatment was not as intensive as adult treatment and therefore selecting these youth was appropriate. From a primary prevention perspective, this was an illogical argument.

The program basically involved two parts: first, attracting the youth into the program through the exciting and challenging outdoor adventure at Hemlock Overlook (an initial hook to motivate them until they had bonded with peers and wanted to continue participation for social and other reasons), and second, developing AOD-free peer networks that would be continuously active and maintain youth involvement over the 3 years of the grant or even beyond. It was hoped that the AOD-free networks would continue to be attractive alternatives to AOD use.

The county staff would lightly supervise the AOD-free network activities. The understanding was that over time the youth would develop leadership and viable group structures that would allow a decrease in staff supervision.

**Table 18. Characteristics of prevention and treatment programs in relation to the Each One-Reach One initiative**

| Characteristic | Prevention | Treatment |
|---|---|---|
| Goal | Develop self-sustaining, drug-free peer networks | Treat youth that abuse drugs; disconnect from drug-using peers |
| Basis of youth's participation | Voluntary | Contractual; mixed: voluntary with some coercion by courts, school, or parents |
| Place of participation in program | Community-based organization; activities in community (park, recreation centers) | Residential treatment or outpatient clinic |
| Name given to youth participant | Participant | Patient, client |
| Model of interaction | Education; fun | Therapy, counseling |
| How staff relates to participants | Facilitates activities and groups; monitors community-based activities | Supervisory: counselor has one-to-one relationship with client; secondarily, group therapy |
| Use of physical program space | Meeting rooms for educational sessions or activities; outdoors | Counselor office for one-to-one sessions; meeting rooms for group therapy |
| What is managed by staff | Activities, networks | Client case management |
| Types of staff | Professional staff and volunteers; can be extensive use of volunteers | Professional staff; intensive; little or no use of volunteers |
| Confidentiality of client records | Minimal records; open | Client file; closed |

Staff supervision would not cease totally, because of the age group and liability laws, but to the extent possible, solid peer networks of mutual aid that were self-determined and self-sustaining were the long-term goal.

The county's treatment orientation was pervasive in many aspects of the work and seemed to be omnipresent. Many bureaucratic procedures were designed on the basis and logic of treatment. The treatment orientation seemed to be very deep seated and consistent. At any given time, the county staff might recognize one aspect of their treatment orientation as inappropriate for the prevention program while simultaneously viewing other parts with an unrecognized treatment bias.

An additional element demonstrating the subtle way in which the treatment orientation was incorporated into the activities links back to theme 1, problematic local bureaucracy. Specifically, the position descriptions for the SAS personnel were written with full collaboration between the county agency and the university. These positions, by county requirements, were within existing job classifications. Because the county system required that current county employees be given first opportunity to apply, it was not surprising that SAS personnel, who were treatment oriented, were among the applicants. The personnel hired, although well qualified for the specified position responsibilities, necessarily brought with them a treatment orientation and background perspective which differed from a prevention orientation. The full implications of this hiring process were not seen at the time.

The principal co-investigators at the university were more consistently prevention oriented because of their training (public administration and sociology), their lack of experience with treatment, and their research experience.

At this writing, the issue of competing philosophies had not been addressed at the management level. Issues such as those cited throughout this section had been addressed on an ongoing basis. However, it was only through the preparation of this section that the fundamental philosophical differences of orientation were identified. It was the plan of the university leadership personnel to seek ways to resolve these differences in orientation in the upcoming months.

## Conclusions

This document was prepared after 1 year of working with an innovative program within a bureaucratic environment. The observations and insights made throughout are intended to assist others who are in or are considering such an effort. Do these comments suggest that the authors would not undertake this project again? Not at all. In fact, they do suggest four areas that they would approach differently.

First, because of the implications necessarily associated with the interface among three bureaucracies, a contract with the third bureaucracy (SAS) would not be initiated. Recognizing their areas of expertise, their consultation would be requested in implementing this project. There were advantages as well as drawbacks to contracting with an external agency, many of which are cited throughout this document. At a minimum, it is recommended that any such contract be accompanied by detailed discussions, understandings, and written memoranda of agreement at the earliest stages of the contract.

Second, the proposal for funding would take into account the length of time necessary to establish such an elaborate, comprehensive, and innovative program. Specifically, 1 year for setting up the program would need to be written into the project activities.

Third, the scope of activities requires that a full-time professional be hired to run the program. The current staff is primarily part time, except for personnel hired by the county.

Fourth, extensive training of all staff needs to be implemented from the earliest days of the activities. Although training was built into the proposal, contract, and schedule of activities, it appeared on reflection that the time allowed simply was not sufficient. The extent of differing orientations was such that extensive training and orientation to address the research and implementation design was necessary.

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# Training Teachers To Integrate Prevention Concepts Into the Primary Curriculum

*Leah Koenig, M.Ed.*

## Introduction

Sixty primary grade teachers of a New York City public school district were trained in alcohol and other drug (AOD) use prevention as one component of an Office for Substance Abuse Prevention (OSAP) grant project entitled "Targeted Primary Prevention." The goal of the training was to have the teachers understand the nature of addiction, to be able to recognize elements in the existing curriculum that have implications for prevention, and to develop the capacity to bring life skills training into the curriculum as a prevention strategy. This chapter describes the context of the training, the training itself, the barriers that were overcome, and results of the first year's evaluation. In addition it makes recommendations for improvement during the second year of the grant, when the training was to be continued.

## Program Description

### *Services*

The teacher training component of Targeted Primary Prevention served 60 elementary school teachers during the 1987–88 school year. Teachers of kindergarten through fourth grade attended a series of four monthly, after-school workshops. Each 2 ½-hour session focused on a specific theme: pleasure and pain, stress management, self-concept, and identifying children at risk for AOD use. The rationale guiding the selection and sequence of the topics was to engage the teachers on a personal level so that they would be better able to identify with the child's perspective. The training demonstrated the program that the teachers were expected to implement. These four sessions were not intended to be comprehensive, and future sessions were to be offered covering other themes.

### *Staff*

The training was implemented by the staff of Project Concern, which is the school-based prevention program of Community School District 18, one of 32 school districts in New York City. During its 17-year life, Project Concern had been monitored and evaluated (Benard 1986; OSAP 1988). The program targets multiple systems—home, school, and community—with an eclectic approach. The project had varied from targeting all youth with prevention to targeting youth in high-risk environments with intervention. In 1987–88, as a result of the OSAP grant, Project Concern was able to target students in the primary grades for prevention and intervention services.

From its inception Project Concern had recognized the interconnection of problem behaviors: delinquency, truancy, academic failure, precocious sexuality, AOD use, and suicide. The program staff began with four guidance counselors, one of whom had been the director continuously. At this writing, it had a staff of 13, two of whom had served the program for more than 10 years. During the life of the program there had been approximately 100 staff members of diverse race, religion, educational background, life experience, and political philosophy. The program reflected the influence of the previous staff and of the humanistic education movement introduced in 1973.

### *Community Context*

Community School District 18 is located in southeast Brooklyn in two neighborhoods known as East Flatbush and Canarsie. East Flatbush has a predominantly low-income, ethnic/racial population with heavy influxes of new immigrants from the Caribbean Islands. Canarsie has a predominantly White, working-class population. The district is a microcosm of the larger urban area. The majority of the population are "working poor" at poverty level and below.

In the district are recent immigrants from Haiti, West Indies, Jamaica, Trinidad, Russia, Italy, China, Greece, Puerto Rico, and the Dominican Republic. In addition to these immigrants, the district is experiencing the impact of an influx of Puerto Ricans and Dominicans from northern Brooklyn.

Approximately 75 percent of the residents of Community School District 18 are ethnic/racial group members. Housing availability ranges from private dwellings to city projects. A large proportion of the children have both parents working outside the home or live in single-parent households. Many are members of blended families, that is, parents and children from two or more families. Over the past decade the economic conditions of the district had been declining, until the unemployment rate for Brooklyn was higher than the unemployment rate for New York City as a whole.

Since the advent of crack cocaine, more and more very young children have become familiar with the drug problem, as they see and even collect the empty crack cocaine vials that litter the streets. In 1987–88 the district experienced a new phenomenon: youngsters were telling their teachers about the AOD habits of their parents.

## *Training Philosophy*

The goal of the training is to enable teachers to integrate AOD prevention education concepts into the existing curriculum. The training should enable teachers to understand the relevance of a program that would give each child a sense of identity, a sense of connection to others, and a sense of power over his or her life. Training should also enable teachers to realize that (1) learning that is meaningful, joyful, and personal is the best positive alternative to AOD use and (2) intrapersonal, interpersonal, and mastery skills can be integrated into the curriculum. It was further expected that, as a result of the training, teachers would become sophisticated in alcohol and other drug prevention issues and thus would make use of "teachable moments" as they occurred in the classroom.

The program is based on concepts of humanistic education, concepts that are now used by almost all dropout, suicide, child abuse, and prevention programs. Some of the salient features of humanistic education are as follows:

- *Confluence*. Thinking and feeling flow together so that the cognitive and affective are integrated.
- *Relevance*. Basic concerns—Who am I? How do I connect to others? Am I good enough?—are connected to the curriculum. Growing, loving, and finding meaning for one's existence are important lessons.
- *Individuality versus commonality*. Individuals are prized for their uniqueness and recognized as the sole authorities of their own experience. At the same time, commonality of human experience is validated as a force that binds.
- *Process versus product*. More emphasis is placed on process than product. Once learned, process (i.e., decisionmaking, problem solving, communication, value clarification) can be transferred to other situations.
- *Experience*. Students are encouraged to learn by engaging in experience, real or structured. The classroom becomes a laboratory for trying out new behaviors.
- *Responsibility*. Responsibility for learning is shared by the teacher and the student. The teacher's role ranges from lecturer and controller to facilitator. Children are encouraged to become self-directed and to learn from one another.
- *Control*. Students exercise more control over choices concerning their education, both in terms of overall goals and their day-to-day activities.

- *Evaluation.* Students are more involved in their own evaluation and they are encouraged to solicit feedback and gather data about themselves.
- *Commitment.* Students are encouraged to become involved in social action and to deal with issues of racism, sexism, and social injustice.

### Training Sessions

Training sessions were conducted in a comfortable conference room at the district office. Refreshments were served and time was allowed for socializing. Folders containing the agenda and carefully chosen pertinent articles were available as participants arrived.

At each session the facilitator introduced the topic by showing its relevance to AOD use and connecting it with previous or upcoming sessions. Discussions and the sharing of ideas took place in large groups, small groups, triads, and dyads. Structured experiences were planned to make the training as experiential as possible.

The following issues were then addressed:

1. What does this theme have to do with you, as you were as a child, and as you are today as an adult?
2. How did the adults, parents, and teachers in your life teach you to cope with this issue?
3. How do you cope today?
4. What do you do now in the classroom that addresses this issue?
5. What excellent commercial curriculum materials are available?
6. How can you integrate into the current curriculum material that addresses this issue?

*Session 1, Pleasure and Pain.* To illustrate that the focus of prevention should be the individual, not the drug, the first session explored the theme of pleasure and pain. Children who are taught techniques for experiencing feelings and strategies to cope with bad feelings do not need to resort to AODs for pleasure or relief.

The teachers were introduced to the book *Teaching Joy to Children* (Eyre and Eyre 1984). This book was written for parents and contains recipelike procedures for teaching children physical, mental, emotional, and social joys and the processes of communication, decisionmaking, problem solving, goal setting, and identity formation.

*Session 2, Stress Management.* At the beginning of the second session on stress management, the trainer asked teachers to recall their own childhood and the strategies used by their teachers to reduce tension during the schoolday. As they responded, the teachers realized that marching in place, playing games, inhaling and exhaling in front of open windows, exercising, and putting one's head down on the desk were stress management techniques. The trainer then asked them to share techniques they use in their own classrooms. This approach not only reduced tension but also reinforced that the teachers, unknowingly, were already doing prevention.

*Session 3, Coping Skills.* Session 3 provided participants with an overview of coping skills. Special focus was placed on skills needed for developing a positive self-concept and how self-concept relates to communication and the ability to be assertive. The teachers were introduced to Satir's term "pot," a metaphor she uses for self-esteem, and the nonverbal postures that illustrate communication styles (Satir 1976). Participants formed triads to share the development of their own self-concepts and to discuss how it affected their lives. They brainstormed ways to incorporate positive self-concept activities into their classrooms, and they compared the traditional lesson plan format with the process lesson format (Borton 1970).

At this time, the research findings of the Rand report discouraged the teaching of self-esteem in favor of teaching resistance skills (Polich 1984). However, the program is based on the premise that positive self-esteem is a requisite skill that precedes teaching resistance to peer pressure skills.

*Session 4, Identifying At-Risk Children.* The final training session on identification of children at risk for AOD use was presented by a staff member trained by the Children of Alcoholics movement. This presentation targeted children with one or both parents alcoholic. Statistics for alcoholics nationwide indicate the possibility of having four to six children of alcoholics in every classroom in America. For many of these children alcoholism is the central fact of their lives. Statistically they have a higher probability of becoming involved with AODs. Teachers learned about family systems and about the roles that the children often assume in these families—superhero, scapegoat, lost child, clown—which are replicated in the classroom. Teachers learned how to identify these children in order to refer them for intervention services.

## Barriers

Three major barriers were encountered in implementing the Targeted Primary Prevention program:

1. Recruiting teachers for the training.

2. Incorporating a new grant into a larger system with multiple, overlapping grants.

3. Integrating a controversial educational philosophy into the curriculum.

## *Recruitment*

Because teachers perceive themselves as overworked, unappreciated, and underpaid, it was expected that many would be not interested in participating in this training. Four specific reasons explain this expectation. First, most of the teachers in the primary grades are women who, in addition to their work, are responsible for their own families and are subject to survival pressures. The children they teach come from homes beset with the same pressures and more, which the teachers are not equipped to handle. Teachers are therefore not disposed to sign up for training after a hard day's work.

Second, elementary teachers are overwhelmed. They are responsible for covering 12 different curriculum areas, for celebrating various ethnic weeks, and for coaching children for a variety of events. Principals press teachers to concentrate on improving skills in reading and mathematics. The teacher is expected to respond to these pressures and integrate all these factors into the child's schoolday.

Third, the system is not clear in its definition of the role and responsibility of the teacher vis-ßÀß-vis the child. Social issues are tossed haphazardly at teachers in response to emergencies. For example, immediately after a tragic event such as a suicide or a death resulting from child abuse, workshops and courses of study are hastily thrown together. No effort is made to coordinate these approaches or integrate them with the overall curriculum, but teachers are still expected to implement them in the classroom.

And fourth, the very notion of training conveys the assumption at the outset that trainees are in a deficit or faulty state that training will correct. The teachers perceive themselves as working for "the system," which does not value training—evidenced by the fact that it pays an hourly rate of $10 for training and more than twice that for writing curriculum. To provide an added incentive, "training" was reframed as "curriculum writing" and job announcements for curriculum writers were posted in every school, thus offering payment at a higher rate than for training. Nevertheless, not one teacher applied.

How did the staff overcome this resistance? The district's health department coincidentally invited the program staff to make an AOD presentation at a series of training sessions for 24 teachers representing all 12 schools in the district. Classroom substitutes were provided so that the teachers were free to spend a half day at district headquarters for the training.

Staff made a sample presentation on risk taking, which served two purposes: the teachers experienced the nature of the proposed workshops, and they gave the staff ideas for convenient scheduling. They suggested that sessions be scheduled monthly, not weekly, because teachers would find weekly commitments too difficult to meet; on Mondays, because teachers were used to after-school conferences on that day; and for 2 ½-hour sessions, because payment for fewer hours would not be worthwhile financially. Following their advice, two series of workshops were scheduled, one for the first Monday of four consecutive months and the second for the last Monday.

Staff reposted an announcement in the 12 original schools and personally addressed announcements to each kindergarten through fourth-grade teacher in the district. Within a week more than 60 teachers had applied.

### *Grantsmanship*

A significant barrier to the delivery of prevention services is inherent in the funding process. Funding is granted for programs that last for a relatively short time; funding is piecemeal to address fragments of major problems; and funding is often affected by politics. As a result, many problems often arise:

- It may take years to train staff to serve in programs that last only 1 or 2 years.*
- Programs proliferate and overlap in content and service.
- Long-range planning and coordination are often impossible.
- Writing applications for grants and reporting to the funding agency after a grant is awarded are both time-consuming activities.

The Targeted Primary Prevention program was hampered by the short timespan between award and program startup. Bureaucratic procedures delayed the hiring of staff by as much as 2 months after advertising.

Community School District 18 has been awarded grants to prevent dropping out of school, to develop workshops for parents to help children do well in school, to promote health, to reduce ethnic/racial population isolation, to provide supplementary guidance services to students exhibiting behavioral problems, and others. In 1987–88 the Targeted Primary Prevention program had grants to develop an action group for volunteer parents to promote community norms against AOD use and to develop a self-help program. In addition, the district was awarded an OSAP grant and the usual base grant from the State of New York. The New York City prevention program has a combined grant for peer leadership, for which the Targeted Primary Prevention program developed the training.

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* OSAP is now funding programs for up to 5 years.

To prevent confusion and overlap and to make the best use of resources, the solution is to have all programs collaborate in the areas of training and curriculum materials. In the Targeted Primary Prevention program, all grants dealing with AOD issues are combined. All staff are considered to be part of the program and are responsible for adhering to regulations in the staff manual, attending training, following the same recordkeeping procedures, and attending staff meetings. New staff people who are hired for grants meet with experienced staff who are more knowledgeable in service delivery. Occasionally a veteran staff member moves to a new program and the new staff member becomes part of the base program. The solution to the bureaucratic problems is to accept with serenity that which cannot be changed.

### *Humanistic Education*

Humanistic education is both a barrier and a solution. Based on Cohen's "alternative model" (1973) the program developed its own model (see table 19) that matches prevention services with the causes of AOD use. In this model, the "services" correspond closely to the concepts of humanistic education. Although humanistic education has lost support in recent years, its concepts are included in every curriculum that is designed to address negative behavior.

Before "back to basics" can succeed, teachers need to reach and touch children to make learning possible. Not intended to place an additional burden on already overburdened teachers, it is believed that the concepts of humanistic education make teaching easier, because they address the apathy, alienation, and hostility of students by providing relevant education. Humanistic education also provides a coordinated approach that is a solution to the fragmentation besetting the elementary school teacher, the school district, and the government agencies that award funds.

## Conclusions

To determine the impact of the training, participating teachers were asked to complete a mailed questionnaire at the end of the school year. The questionnaire sought teachers' opinions about various aspects of the training, its impact on their classroom instructional activities, and suggestions for modifying future training activities.

Although the findings were generally favorable, a few of the teachers requested lesson plans, indicating that they had missed the main point of the training. Teachers were asked to infuse elective humanistic concepts into what they were already doing. What should have been done, and what was planned for the second year, was to have the teachers practice infusion in the training

**Table 19. The Targeted Primary Prevention model of prevention services and causes of alcohol and other drug use**

| Cause | Prevention Service |
|---|---|
| To tranquilize feelings, to avoid strong feelings (fear, sadness, pain, anger, rage, loneliness, anxiety, depression) | To teach how to cope with feelings; to teach how to confront feelings, issues, and people |
| To escape problems | To teach problem solving, decisionmaking, and conflict resolution |
| To increase confidence and independence, to reduce shyness | To develop positive self-concept and a strong sense of identity, to value uniqueness, to communicate effectively, to assert oneself, to develop social competency skills |
| To change mood | To provide experiences with fantasy, to provide an understanding of perception and how one's notions of reality are constructed and distorted |
| To change oneself | To practice role playing, to develop one's self-acceptance and self-esteem |
| To be accepted by peers, to be liked, to cope with boy/girl inhibitions | To teach group dynamics, social competency skills and resistance to group pressure |
| To relax, to reduce anxiety | To teach sensory awareness and stress management |
| To rebel, to act grown up, to defy authority | To teach social commitment, acceptance of responsibility, communication, and assertiveness |
| To feel pleasure; for fun; to enhance lifestyle; to stimulate sight, sound, touch, taste | To teach positive alternatives to abuse |
| To deal with alienation, meaninglessness, anomie, powerlessness | To encourage students to develop a personal philosophy of life, to form values, to provide opportunities to demonstrate commitment and responsibility |
| To satisfy unconscious needs and wishes | To gain psychological awareness, self-knowledge, and insight |
| To offset boredom | Positive alternatives (art, music, gardening, socialization) |

**Table 19 (continued)**

| Cause | Prevention Service |
|---|---|
| To satisfy curiosity, to experiment | To expand consciousness in nonchemical ways |
| To take risks | To teach to differentiate positive from negative risk taking, to learn to take calculated risks |
| To imitate role models who abuse | To provide positive role models and to offer programs for abusing parents |
| To reward oneself | To learn how to celebrate life in nonchemical ways, to be self-rewarded as a result of one's effectiveness and competence |
| To offset overwhelming family problems | To teach coping skills, to provide structure, to provide boundary setting |
| To deal with death, separation, loss | To provide sensitivity training for teachers, to develop acceptance/ understanding of death |
| Because of genetic susceptibility | To identify children of AOD abusers and provide supportive services |
| Because the drugs are available | To provide accurate information about the hazards of drugs |
| Because some students find school intolerable | To train teachers to make school an exciting, meaningful, joyful experience |

NOTE: Developed by Leah Koenig, May 1989.

sessions. This would help them learn how to create "teachable moments" in the service of AOD prevention. In addition, the staff considered having participants bring in lessons they had used that day and work together to incorporate prevention issues into those lessons.

The program will expand the series of training workshops to six or eight sessions in the second year. It is anticipated that one or two series will run depending on the enrollment. Future sessions will focus on the following themes: perception, identity, boundary setting, trust building, value formation, goal setting, fantasy, magic thinking, peer selection, communication, assertiveness, decisionmaking, and problem solving.

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# Partnership in Prevention: Overcoming Barriers and Hurdles

*Sharon T. Weaver, Ph.D., and Frances E. Young, Ph.D.*

## Introduction

Project Involvement is a unique consortium approach designed to address the needs of children and youth who are at risk for involvement with alcohol and other drugs (AODs). Using the prevention continuum as an operational model, two publicly funded drug dependency treatment facilities, an AOD education and prevention center, and the University of North Florida (a State university) have joined forces to unite a North Florida community by implementing a variety of programs along the prevention continuum.

The consortium was established to determine if these four lead agencies in two counties could (1) work together by sharing resources and expertise, (2) effectively deliver individual agency services, and (3) network and link with other organizations and groups of people who work directly or indirectly with, or are affected by, the target population.

## Program Description

The following brief summary of Project Involvement provides background on the barriers and hurdles that had been encountered at this writing.

Project Involvement is designed to have an impact on the use of AOD; it focuses on a target population of at-risk adolescents and children, and their families and significant others. Briefly, the program has five major goals; six independent research-supported program components, several of which are multidimensional; continuous organizational networking; numerous essential community linkages; and a triad evaluation design for looking at process, product and outcome, and consortium approach. The program components address AOD prevention among youth at all three levels of the prevention continuum, primary, secondary, and tertiary. Figure 5 provides a schematic overview of the program design.

### *Primary Prevention*

Not to be overlooked in primary AOD use prevention among youth are the education and training needs of the teachers, guidance counselors, health professionals, and parents who are needed in the fight against AOD use (Buchannan 1984; Manning and Vinton 1981). Project Involvement is a multidimensional program that is coordinated through the university, but it

**PROJECT INVOLVEMENT: A Consortium Approach to Alcohol and Other Drug Use Prevention**

Goal: To demonstrate the value of a community-based education and services program in preventing alcohol and other drug use among adolescents.

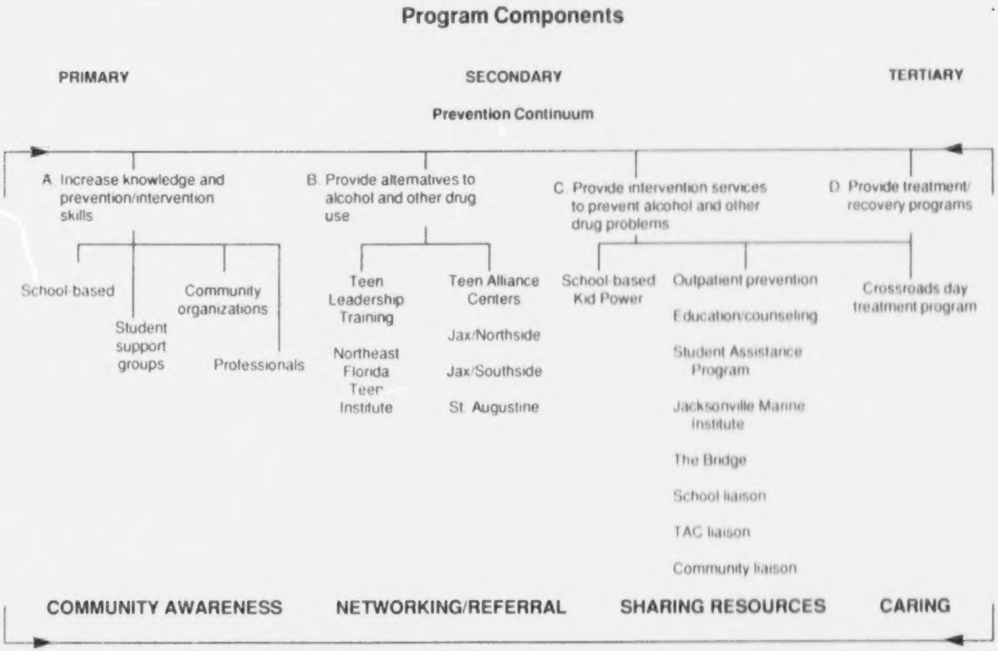
Program Components
PRIMARY
SECONDARY
TERTIARY
Prevention Continuum
A. Increase knowledge and prevention/intervention skills
School-based
Student support groups
Community organizations
Professionals
B. Provide alternatives to alcohol and other drug use
Teen Leadership Training
Northeast Florida Teen Institute
Teen Alliance Centers
Jax/Northside
Jax/Southside
St. Augustine
C. Provide intervention services to prevent alcohol and other drug problems
School-based Kid Power
Outpatient prevention
Education/counseling
Student Assistance Program
Jacksonville Marine Institute
The Bridge
School liaison
TAC liaison
Community liaison
D. Provide treatment/recovery programs
Crossroads day treatment program
COMMUNITY AWARENESS
NETWORKING/REFERRAL
SHARING RESOURCES
CARING

Figure 5. A schematic overview of Project Involvement.

involves the schools, the university, and a broad range of community agencies and health professionals. In addition to the training component, the university also provides assistance and supervision to teachers in establishing student support groups. The need for this extension into secondary prevention has been clearly documented (Buchannan 1984).

### *Primary-Secondary Prevention*

At the primary-secondary prevention end of the continuum, the Teen Leadership Training program addresses the development of teen leaders as a cadre of prevention advocates (Buchannan 1984). These teenage clients are recruited from junior high and high school students who are not currently involved in AOD use, and it brings them together in a format of group meetings and an indepth weekend or week-long experience of sharing, planned instruction, recreation, building self-concept, and peer pressure reversal (Scott 1987).

Also in the range of primary and early secondary prevention, but with preteenage youth, is the Kid Power program. This program brings school-based counseling to troubled elementary school children who are at risk of developing behavior patterns that may lead to AOD problems (NIDA 1987).

The Teen Alliance/Youth Development Center is designed to bridge the gap between primary and secondary prevention by providing youth with alternatives to using AODs. Three Teen Alliance Centers, operating in neighborhoods with a large population of high-risk youth, are gathering places for a variety of activities that focus on creating a personalized support environment that builds the skills needed for positive coping and decisionmaking. These centers are actually youth development centers, based on previously implemented model programs. Professional staff are provided, and the community is involved—as are the teens, through youth advisory boards.

### *Secondary-Tertiary Prevention*

Moving along the continuum, secondary-tertiary prevention program components are designed to assist children, youth, families, and significant others in working through difficulties attributed to AOD problems.

Project Involvement's Outpatient Education Intervention Counseling program places counselors and intake assessment professionals at a variety of specifically selected sites throughout a two-county area to provide early intervention and outpatient services (Ritson 1985).

### *Tertiary Prevention*

Finally, at the tertiary end of the continuum, the Crossroads day treatment program offers a unique approach to young persons whose AOD use has negatively affected their lives by creating social, emotional, economic, or legal problems. This intensive educational and therapy program is provided after school and during the early evening and includes a family counseling and support group.

To accomplish the goals of this multidimensional project, a staff of 36 professionals and 8 support personnel has been employed or reassigned.

## Internal Barriers

After 1 year of the projected 2-year commitment, the naivete with which the proposal had been conceived was being revealed. The possibility of success and disappointments, adjustments, and adaptations had been expected with a demonstration grant, but some of the problems were surprises.

### *Operations*

The grant award was to a State university with subcontracts to three community services agencies. The initial problems of negotiating the paperwork were expected, but not to the extent encountered.

The first funds could not actually be requested until 3 months into the grant period. Because of the separate operations of three individual agencies and a university system that is part of the State comptroller's office, time was required to work out mutually acceptable details of programmatic and fiscal accounting. At the close of year 1 it was apparent that some of the unexpected problems might have been avoided if the initial details and guidelines of operation had been better defined in the early months, or if there had been more time between notification of the award and the designated startup time.

Although this problem still had not been completely resolved at this writing, the solution was being worked out through new and more definitive contracts. An operations manual containing clear guidelines for procedures, responsibilities, and lines of authority was also being developed by the university.

Locating the office space and furniture that had been readily committed by the four consortium agencies in the proposal was another hurdle that took time and delayed productivity. It suffices to say that enough time should be planned to allow for organizational setup before undertaking program activities.

### *Communication*

In retrospect, Project Involvement's most challenging internal barrier was communication. The term "consortium" and the mutual mission of preventing AOD use among youth made the authors clearly aware of the importance of "oneness" in the project. Unfortunately, the difficulties that arose in trying to achieve that oneness could not be overcome.

Two major committees were formed early in the project to facilitate communication. The first, the Grant Management Team, had five members: the project's principal investigator and the community prevention director (both from the university) and the executive directors from each of the three community services agencies. Other key support staff were to meet regularly with the Grant Management Team. It met at the monthly meeting.

The second committee was the Project Review Committee, comprising the eight program component directors and the community prevention director. The project's evaluation director met with the committee periodically. The Project Review Committee, considered the "working" committee, met twice a month.

To involve other major community agencies and interested groups, a Community Advisory Board was also established. This board's representation crossed all relevant groups in the community and met quarterly. Its purpose was to involve more organizations and individuals in the consortium approach.

Minutes were kept for both the Grant Management Team and the Project Review Committee and were distributed to all members and to other selected project associates. Although the basic work of these committees was to facilitate communication and problem solving, both groups were mired from the onset in discussions of administrative minutia, fiscal reporting procedures, and budgetary decisions. The amount of time expended on few or no decisions was frustrating for everyone involved. Because the preliminary operational activities took precedence during the first months of the project, even the Project Review Committee fell into the trap of endless administrative discussions.

In addressing the problem, it was necessary to look at some of the root causes. One of these was a difference in definition of some of the terms basic to Project Involvement. The terms "consortium," "Grant Management Team," and "matrix management" were interpreted to mean an equal partnership among the university (the grantee organization) and the three community services agencies (the contracting agencies). Because this type of management was generally viewed as ideal, this interpretation persisted until it became untenable for the grantee organization. Because the university was the responsible party, both fiscally and programmatically, it had to exercise its role as decisionmaker in the midst of confusion and misunderstanding among the contracting agencies.

The interim period of misconception about operating through committee management created more difficulty than would have existed if early guidelines for roles and responsibility had been clearly defined. To overcome the barrier that developed in the oneness concept, the help of a management consultant was enlisted; clear guidelines were provided and discussed in open dialogue at meetings of the Grant Management Team and the Project Review Committee. In addition, second-year contracts were revised to address the problems of the first year, and a manual on roles and responsibilities was prepared.

The magnitude of the project's program of work and the differences in operation of the four consortium agencies made both interagency and intra-agency communication complex. This complexity became acutely problematic on those occasions when individuals and organizations outside the project were informed about project activities before those on the "inside." It was also extremely awkward when actions were taken without the necessary prior approval. All concerned agencies and individuals knew the importance of a high level of effective communication, but reaching this level was not automatic.

Several new vehicles designed to improve communication were tried. An updated 2-week calendar of events was prepared in the central office and mailed every Friday to all program directors. Each of the program components reported upcoming events of interest that were listed on the calendar; project staff were welcome to attend all meetings, training programs, and events. Another mechanism that helped the university staff keep abreast of what was happening was the sharing of notes and minutes from the staff and advisory group meetings of the various program components. A copy of all correspondence was routed among the project staff at the university, providing them a quick update on what was happening.

Finally, the time requirements for administering and managing the applications, screening, and reporting procedures of all the programs were a major hurdle. A preliminary meeting with the Florida Department of Health and Human Services and Department of Licensure and Professional Regulation might have enabled the project to handle these requirements in a more efficacious way.

In summary, the most basic and pervasive internal problems encountered from the beginning were ones of communication and administration. In addition to the obvious problems of communication within and among organizations, the differences in definition of basic terms created gaps in understanding and expectations.

## External Barriers

### *Operations*

The first external hurdle for Project Involvement came in setting up linkages with the community organizations essential for the successful operation of the various program components. Because the university and the community services agencies were already linked with some of these organizations, networks were in place and only adaptation was required.

The problem stemmed from the fact that all four consortium agencies had preestablished arrangements with the same organizations, so they were somewhat hesitant to muddy the water by changing their one-to-one linkages into Project Involvement linkages.

At first the university attempted to let the contracting agencies continue "business as usual." Unfortunately, this arrangement worked for only a short time. Confusion soon entered the picture and the linkage organizations sought clarification and unification. Now the contracting agencies had the problems of coordination and making some changes in the previous system, which took time and temporarily increased their administrative load.

An unexpected barrier was the difficulty of explaining the project to the community. Its complexity defied early efforts at description, and the feedback from various community groups clearly indicated that something was lacking in the program's public story. Success came with a combination of presenting Project Involvement through a narrative overview and a schematic design (see fig. 5).

A major hurdle was finding definitive answers to questions of procedure and regulation in meeting the various State and local licensure requirements. Variations in answers from district to district and county to county were expected, but variations provided from individuals representing the *same* office made it more difficult to coordinate efforts and develop clear, across-the-board guidelines.

### *Programs*

Two of Project Involvement's programs, Kid Power and Teen Leadership Training, graduated from the drawing board almost immediately because they were adaptations and expansions of existing programs. The two training programs for school-based personnel (advanced training for AOD use prevention and supplemental training of facilitators for student support groups in the schools) faced the expected administrative problems. It was a challenge to secure graduate credit hours and arrange admission and registration procedures for a nontraditional course that contributed no income or full-time equivalents to the university. The remaining two training programs sponsored through the university were implemented during year 1 and at this writing were being reevaluated for year 2.

Project Involvement's outpatient prevention, education, and intervention program placed its staff of counselors and intake assessment specialists at strategic sites throughout the two-county area. Working through the process of selection and arrangements offered some challenges that had been expected. Contract linkages had to be negotiated with the selected agencies and organizations, and space had to be located to house new staff.

In each situation, the manager or director provided supervision at the site. Once a week, the counselors from the project met as a group with the project director to discuss problems and review selected cases. Also, the program component director periodically monitored the site.

This system was effective in overcoming the problems that might be anticipated in working with a field staff. Direct contracting and accountability to only one organization might have been more efficient but would not have offered the same access to group wisdom.

The major external hurdle arose with the Teen Alliance Centers. No one expected it to be easy to locate three sites that would meet the many criteria of the program's wish lists, but in fact this program component provided more barriers and hurdles than had been remotely expected. A number of false starts created delays, frustrations, and unprojected moves.

At this writing, one center has been officially opened; a second center, after several months of partial operation, has just secured a new location and is moving; and the third center was still fighting battles of renovation. The concomitant hurdles can be imagined. Purchase of equipment and materials to implement the alternative programs and activities could not be concluded without a secure location for delivery. Youth and adult advisory boards grew less enthusiastic. Staff decided to move on to other jobs. Recruitment of volunteers came to a halt. Promotion efforts also stopped. Planning continued with less than the original excitement. To overcome these hurdles, advisory groups were introduced as support mechanisms. But Project Involvement continued to seek solutions and recommendations.

## Conclusions

The consortium approach can provide a demonstration model of communitywide AOD use prevention for children and youth. To be both effective and efficient, this model continues to require a high degree of community awareness, ongoing networking, sharing of resources and expertise, and forming of linkages with organizations that deal with, or are affected by, youth in high-risk environments and their families and significant others. Basic to the successful operation of a consortium model are clearly defined guidelines, mutually understood and practiced by all parties.

The four primary agencies in this consortium encountered a series of obstacles that have inhibited the potential effectiveness of the consortium. It is well known that communication and trust are the key factors to success in any endeavor. When trust has been eroded, a concerted effort, open communication, and time can most often facilitate the rebonding of relationships. If the four primary agencies involved work together to resolve problems, act to prevent future disagreements, and use their "collective intellect," the barriers encountered in this consortium approach can be overcome. By working together, the agencies can achieve the original intent of the consortium model.

The foremost important recommendation for any type of project implementation is extensive planning. Planning provides the means for establishing programmatic goals and objectives and the strategies to achieve them. It allows for decisionmaking on fiscal structure and accountability. It requires extensive brainstorming, drawing on the collective intellect to achieve realistic expectations.

It is imperative in multidimensional programming that each program be well thought out to identify and address the potential barriers early in the planning. In too many situations, program needs are not well defined, and the results can be devastating when committed objectives do not match the funding required to achieve them.

A second recommendation addresses the need to define roles and responsibilities. Both fiscal and programmatic accountability are paramount for the success of any program, but especially when groups of people from diverse backgrounds are working together. Misinterpretation can be avoided when clear, concise definitions of key terminology are presented in writing.

A third recommendation addresses management. Clear lines of authority must be established before any project is implemented. Authority is so closely linked with roles, responsibilities, and accountability that the decisionmaking process is in jeopardy unless it is clearly understood who is responsible, and therefore accountable, for all programmatic and fiscal procedures and policies.

Fourth, established policies and procedures are the key ingredients to any successful endeavor. Perhaps one of the main areas overlooked in Project Involvement was the establishment of policies and procedures at the outset. The variations in procedures and administrative red tape among nonprofit agencies and institutions such as a State university are known to create problematic situations (Kelly 1988). As the project moved into second-year grant activities, it appeared that the planned procedural manual might not be as much help to this project as it would be to other future projects.

A final recommendation addresses communication. Communication can be the greatest pitfall or the salvation of any undertaking, especially one of this diversity and magnitude. Interoffice and intraoffice communication breakdowns are often the most difficult barriers to overcome. It is essential to any cooperative effort to keep communication lines open by accepting individual differences and by being proactive rather than reactive. The well-noted premise that listening is more important than talking cannot be overemphasized.

In addition to interoffice and intraoffice communication, the need for guidelines in communication to the community is very important. Establishing and maintaining linkages with other organizations and groups of people provide the remaining components in the structure of a consortium. In building a consortium of this nature, who says what to whom and how determines the future. The lead agencies in the consortium must be consistent and factual in presenting project information to the community. How a project is perceived can be the turning point for its success. Often this type of communication is built not only on knowledge but also, perhaps even more important, on trust. If trust is lost and cannot be regained, then all is lost. The biggest deterrent to building a consortium as a communitywide approach to AOD use prevention is to give mixed messages to a community. A strong effort must be made to prevent this from happening.

In summary, it is of tantamount importance that the organizations responsible for establishing and maintaining a consortium are willing to (1) keep communication lines open, (2) rebuild trust and bonding if they are jeopardized, (3) accept the differences in people, and (4) work together and support one another in a unified way to achieve program goals and objectives. By working together for the good of the whole, organizations can overcome barriers and achieve a positive, lasting impact.

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# CHAPTER 4

# Evaluation

## Introduction

Ungerleider and Caudill evaluated the impact of alcohol and other drug (AOD) awareness training on school teams. The training, focusing on awareness, identification, and intervention with youth in high-risk environments, seemed to increase teacher confidence in recognizing problems and taking constructive action. After training, teachers expressed the need to revise existing school policies and increased the number of AOD awareness lessons in their classrooms.

St. Pierre, Kaltreider, and Johnson offered Smart Leader training to members of Boys Clubs. The training, offered as booster sessions, helped to develop additional programming for younger members in the clubs. The authors concluded that the program delayed additional AOD use somewhat at an age at which dramatic increases are usually seen.

Conner and Conner assessed the impact of an intensive retreat for American-Indian youth in high-risk environments and found that the experience greatly reduced excessive drinking among their targeted adolescents. Their evaluation design was unique in assessing attitudes that were and were not expected to change. Those variables not expected to change because they were not related to the goals of the retreat served as a control for the attitudes that were expected to change. Their results were consistent with these expectations and their model for evaluation was very appropriate for demonstration programs.

Another intensive retreat model was evaluated by Glider, Kressler, and McGrew. Their focus was on skills training to resist peer, parental, and societal pressures to use drugs. The retreat encouraged open discussion of problems and concerns about peers and families. The results indicated reductions in the use of AODs and increases in self-esteem. This intensive retreat model has the advantage of not conflicting with normal school scheduling and of providing for indepth training without interruption.

# Effects of Primary Prevention on Attitudes and Alcohol and Other Drug Use With At-Risk American-Indian Youth

*Joe L. Conner, Ph.D., and Carol Nice Conner, Ph.D.*

## Program Description

### *The Problem*

It is generally accepted that involvement of American-Indian youth with alcohol and other drugs (AODs) is very high compared with all youth in national usage studies (Beauvais et al. 1985; Mason 1985; NIDA 1987; Public Health Service 1987). Alcohol, marijuana, and inhalants are by far the most common drugs of both frequent and infrequent usage for American-Indian youth (NIDA 1987). In the Oklahoma area where 42 percent of this study's sample resides, the rate of American-Indian adolescent alcohol use also is higher than the national rate (Western Behavioral Studies 1986). In 1985, Beauvais and Oetting estimated that almost 50 percent of American-Indian adolescents were at risk for physical or emotional problems due to AOD use. It seems clear that AOD use, with special emphasis on alcohol use, is a significant social and health issue that warrants serious prevention and intervention efforts.

Norem-Hebeisen and Hedin (OSAP 1988) delineated several broad factors that correlate with AOD use, including the social network influence of peer pressure. Although they indicated that peer influence may be helpful to youth, they also noted that it is a potent stimulus for AOD use. For adolescent American-Indian youth, peer pressure has been specifically identified as the single most important factor in AOD use (NIDA 1987). Thus, peer influence is a worthy focus of prevention strategies among American-Indian youth.

Alcohol-related automobile accident mortality for American Indians and Alaska Natives between the ages of 15 and 24 is more than twice the national rate (Public Health Service 1987). The Indian Health Service has determined that, for this age range, motor vehicle accident fatalities lead all other causes of death. Reducing these statistics is another worthwhile focus for prevention efforts with American-Indian youth.

### *The Program*

A one-time, 5-day summer camp was undertaken in August 1988 to address the high rates of AOD use and alcohol-related automobile accident mortality among American-Indian youth. Over the past several years, the popularity of wilderness and camp experiences has increased considerably. The benefits attributed to camp experiences range from increased self-confidence to increased prosocial behavior. Camps have been used by a wide variety of groups, from corporate executives to delinquent youth. Their focus ranges from intense therapeutic efforts (Buie 1988) to the purely recreational. This camp, which represented a blend of therapeutic and recreational opportunities, involved considerable collaboration among professionals and volunteers from Oklahoma and New Mexico.

It was felt not only that a camp would produce general salutary effects on campers, but also that the self-contained nature of the camp would make it possible to measure these effects. It was also decided to test the immediate effects of specific prevention strategies on attitudes related to drinking and driving, peer influence, and estimates of future AOD use.

Various prevention strategies and methods have been used and proposed for use with American-Indian populations, but few have been tested. Among the methods frequently mentioned are informational, persuasive, affective, environmental, and those that strengthen traditional tribal and cultural values (Public Health Service 1987; Springer and Phillips 1986). Informational methods include presenting factual material. Affective methods may include psychosocial strategies such as teaching specific methods for resisting social pressure. These two strategies—psychosocial and informational—were used in the isolated setting of the camp, where extraneous influences could be eliminated or controlled and the effects of these strategies on attitudes toward drinking and driving and peer pressure could be assessed.

The strategies were implemented with the idea that they would be fun, relevant, and minimally obtrusive. Cultural relevancy was enhanced contextually by the staff, who had had many years of experience providing psychological and counseling services to American Indians, and the majority of whom were American Indians themselves.

While it is recognized that the most desired outcomes of prevention programs are realized only after months or years of effort, immediate and short-term outcomes like attitude change are important to document. Indeed, psychometrically measured expectancies of drinking have been found to be highly correlated with adolescent drinking problems, including problem drinking and alcoholism (Christiansen and Goldman 1983). In addition, documenting short-term outcomes of prevention efforts provides an empirical base for planning and revising ongoing prevention programs.

Self-reported intentions not to drink or use other drugs may be suspect in chemically dependent individuals, but such reports by individuals who are not chemically dependent may be of an entirely different reliability and validity. Predictions of AOD use before a major social function (the annual powwow), which were made by American-Indian youth who were not chemically dependent, were positively and significantly related to actual use during the powwow (Conner and Conner 1988).

## Evaluation Design

### *Hypothesis*

In this study, the overall effects of a summer camp on expected AOD use after camp and the effects of two prevention strategies on attitudes toward drinking and driving and peer influence were assessed. Self-reports from 52 at-risk American-Indian and other at-risk youth were used in a nonequivalent, dependent-variable, quasi-experimental design to determine the immediate effects of these prevention strategies on relevant links to destructive AOD use.

### *Subjects*

Subjects were 102 youth from Oklahoma and New Mexico. There were 74 who identified themselves as American Indian; of these, 42 were from northern New Mexico pueblo communities, 31 were from rural nonreservation American-Indian communities in north central Oklahoma, and 1 was from a rural reservation in northern Wisconsin. Fifteen youths identified themselves as mixed American Indian and Hispanic or Anglo; of these, 14 were from the New Mexico pueblo communities and 1 was from rural Oklahoma. Five youths from rural Oklahoma identified themselves as White. Eight subjects completed neither the precamp nor the postcamp questionnaire. Of the 102 possible participants, 52 males and 40 females completed both questionnaires; the mean age was 13.0 years.

A composite risk score was computed for each of the 92 subjects. Such factors as parental AOD abuse, close friend's AOD use, despondency, and personal AOD use were assigned weighted numerical ranks and were summarized to yield an overall risk score. These factors are understood to both increase the risk of AOD use and are correlated with AOD use (Public Health Service 1987).

By this method, 78 percent of the subjects were determined to be at or above a moderate risk level. Twelve percent were at high risk and 5 percent were at very high risk. As internal validation for these categories, the frequency of problem drinking in the family (a relatively robust risk factor) was determined for each subject in the moderate-risk, the high-risk, and the very high-risk categories. The reported frequency of problem drinking in families was 49 percent for those at moderate risk, 70 percent in the high-risk category, and 80 percent in the very high-risk category. Finally, risk scores were found to be normally distributed.

Ninety-two subjects completed both precamp and postcamp questionnaires accurately enough that the overall effects of the camp experience could be assessed, and 52 subjects completed both sufficiently so that the effects of the two specific prevention strategies could be assessed.

## *Instruments*

All subjects were administered either a 21-page questionnaire (subjects aged 13 or older) or an 18-page questionnaire (subjects aged 12 or under) on the first day of camp and a 5-page questionnaire on the last day of camp. The questionnaire collected information on risk factors, demographic data, attitudes related to AOD use, past and expected alcohol use, alcohol intoxication, and other drug use.

The attitudinal measures were taken from a test devised by the National Highway Traffic Safety Administration (1983) consisting of 40 questions that measure eight different, but not necessarily uncorrelated, attitudes toward drinking and driving, impulsiveness, effects of peer pressure, hostility, attitudes toward parental influence, and attitudes toward intervening in friends' AOD use.

Subjects were asked on the precamp questionnaire to rate the frequency of their alcohol use, alcohol intoxication, and other drug use in the past 30 days. Subjects were then asked on the postcamp questionnaire to rate their expected frequencies of alcohol use, alcohol intoxication, and other drug use for the 30 days following the camp using the same rating system. It was predicted that all the expected frequencies would be less than in the 30 days before camp. These measures were taken to assess the overall or general effectiveness of the camp experience.

Although all eight attitude constellations were measured before and after the camp, only three were predicted to change as a result of the two strategic prevention efforts. The attitudes that were expected to change were the tendency to rationalize drinking and driving (responsible driving), the impact of negative outcomes on the decision to drink and drive (impact of negative outcomes on drinking and driving), and the tendency to resist peer pressure (peer resistance).

## *Procedure*

Two strategic prevention strategies were tested during the 5-day camp. The first strategy (informational) required subjects to answer a single question pertaining to drinking and driving before they entered the cafeteria. Questions were asked at six meals. All were answerable true or false by placing a bean in a jar. The percentage of subjects who chose the correct answer was announced after the meal. One such question was "Sixty thousand lives are lost each year to alcohol and other drug-related auto crashes: true or false?" This strategy was called "Food for Thought." The second strategy (psychosocial) entailed assembling all subjects on the third day of camp to observe a skit performed by fellow subjects. The skit involved four youths who were drinking beer and applying pressure on a fifth by teasing and cajoling him to drink as well, but he declined. Immediately after the skit, subjects were divided into 10 small subgroups, each led by a camp counselor, which were assigned to suggest other ways the fifth subject in the skit could have declined drinking; things he could say to himself when his drinking friends rejected him; and some way to praise or reward himself for resisting this pressure. Each subgroup selected a spokesperson to report its answers back to the entire group. Responses were commented on or rewarded by the entire group. This strategy was called "Thinking and Drinking." Both strategies were evaluated by assessing pretest to posttest change in all eight attitude constellations.

A nonequivalent, dependent-variable, quasi-experimental design (Cook and Campbell 1979) was used to enhance the interpretability of attitude results. Specifically, of the eight attitude constellations measured, only three—responsible driving, impact of negative outcomes on drinking and driving, and peer resistance—were predicted to change as a result of the strategies. The remaining five nonequivalent but related variables were not predicted to change. In the remainder of this paper, the three attitude constellations of interest are termed "target attitudes" and the remaining five are termed "nontarget attitudes."

## Results

As predicted, the subjects' ratings of expected frequency of alcohol use and intoxication for the 3 days after camp decreased in comparison to reported behavior (actual use and frequency) 30 days before the camp experience. Mean precamp and postcamp ratings of alcohol use frequency were 1.21 and 0.777. Mean precamp and postcamp ratings of intoxication frequency were 0.774 and 0.488. Postcamp ratings of alcohol use frequency were significantly lower than precamp ratings ($t$ (89) = 3.28, $p < .005$). Postcamp ratings of expected frequency of intoxication were significantly lower than precamp scores of actual frequency ($t$ (89) = 2.01, $p < .025$). Subjects' ratings of expected use of other drugs also decreased but were not statistically significant.

Predicted precamp-postcamp changes occurred in two target attitudes; no nontarget attitudes changed from precamp to postcamp ratings. See table 20 for means on target and nontarget attitudes.

Scores on the target attitude constellation pertaining to responsible driving increased from precamp to postcamp. Mean precamp and postcamp scores on

**Table 20. Means on target and nontarget attitudes**

| Attitude | Precamp | Postcamp | Significance of difference |
|---|---|---|---|
| | Target attitudes (predicted to increase) | | |
| Responsible driving | 14.2 | 16.2 | $p < .005$ |
| Impact of negative outcomes | 15.0 | 15.7 | NS |
| Peer resistance | 13.8 | 15.7 | $p < .005$ |
| | Nontarget attitudes (no change predicted) | | |
| Taking responsibility for others | 14.1 | 14.6 | NS |
| Belief that cars are no more than transportation | 13.1 | 13.1 | NS |
| Willingness to listen to authorities | 14.1 | 15.2 | NS |
| Frustration tolerance (hostility control) | 13.3 | 14.1 | NS |
| Lack of impulsiveness (impulse control) | 14.5 | 14.3 | NS |

NOTE: Scores on target and nontarget attitudes range from 5 to 25. NS = not significant.

responsible driving were 14.2 and 16.2. Postcamp scores on responsible driving were significantly higher than precamp scores ($t\,(51) = 3.25, p < .005$).

Scores on the target attitude constellation pertaining to a subject's tendency to be positively affected by the various negative outcomes on drinking and driving increased from precamp to postcamp, but the increase was not significant.

Scores on the target attitude constellation pertaining to peer resistance increased from precamp to postcamp. Mean precamp and postcamp scores on this target attitude were 13.9 and 16.2. Postcamp scores on peer resistance were significantly higher than precamp scores ($t\,(51) = 3.006, p < .005$). See figure 6 for the pattern of effects from precamp to postcamp target and nontarget attitudes.

## Discussion and Recommendations

In the analysis of the immediate effects of the 5-day summer camp, 92 subjects' self-reported expected use of alcohol and intoxication frequency 30 days after camp decreased significantly from self-reports of use and intoxication 30 days before the camp. Expected use of other drugs also decreased, but the decrease was not statistically significant. This aspect of the study, a one group pretest and posttest design, was used to assess any overall salutary effect on relevant factors such as AOD use frequency. These effects were demonstrated, and it is contended that the camp experience had been highly instrumental.

Cook and Campbell (1979) said that this design's interpretability can be enhanced if the subjects are physically isolated and the interval between pretest and posttest is short.

The outcomes of the two prevention strategies "Food for Thought" and "Thinking and Drinking" were analyzed by comparing precamp to postcamp scores on related but nontarget attitudes. As predicted, subjects' tendency to endorse more responsible attitudes toward drinking and driving and toward resisting peer pressure, which were both target attitudes, increased significantly. Subjects' tendency to endorse attitudes indicative of the importance of negative outcomes in their decisions to drink and drive also increased, but not significantly.

Consistent with predictions, none of the five related but nontarget attitudes changed. Attitudes related to subjects' ability to control impulsiveness, hostility control, willingness to listen to authority, ability to realistically appraise the importance of a car, and tendency to take responsibility for others did not change significantly. This pattern of selective change in targeted attitudes and corresponding lack of change in nontargeted attitudes suggests that the "Food for Thought" and "Thinking and Drinking" strategies had precise and potent effects on attitudes related to responsible driving and resisting peer pressure.

Threats to the interpretability of the research design seemed implausible in this study. Cook and Campbell (1979) said that strong causal inferences are possible when hypotheses are made regarding predicted patterns of change between or among conceptually similar dependent variables and when effects of history, maturation, statistical regression, measurement reactivity, and instrumentation are eliminated or controlled. The isolation of the camp and the short interval between pretest and posttest rule out history and maturation as explanations for changes in attitude. All pretest attitude scores for camp subjects were comparable with national scores, hence ruling out statistical regression. Because both targeted and nontargeted attitude questions were of similar desirability and all were on the same questionnaire, reactivity and instrumentation effects were implausible causes for the significant attitude changes.

In general, it may be concluded that the camping experience (which included recreational, leisure, cultural, and two unobtrusive and brief alcohol-use prevention activities) had a significant impact on this predominantly American-Indian but culturally and geographically diverse group of youngsters. The overall salutary effect was on their willingness to endorse less frequent drinking and less frequent intoxication. For instance, this group's average reported frequency of drinking in the 30 days before camp was from 1 to 2 days. Their average expected in the 30 days after camp was zero.

Specifically, the two prevention strategies significantly increased these youths' willingness to reject drinking and driving and their willingness to reject peer pressure. Although it is difficult to ascertain empirically which of the two was more effective, anecdotal evidence suggested that the "Thinking and Drinking" skit most impressed these youth. This would be consistent with the positive outcomes observed in other ethnic groups using psychosocial methods (Jones and Bell 1986).

## Summary

These results suggest several significant methodological and substantive findings. The use of a summer camp can isolate extraneous effects from treatment or prevention effects. Where a control or cohort group comparison is not feasible, the camp option would enhance the interpretability of the single group pretest-posttest design. In addition, the use of multiple related dependent variables and predicting pattern changes also would enhance the single pretest-posttest study. These methods could add valuable tools to the efforts of outcome researchers use to measure change in field settings.

Substantive findings of this study include the demonstration that relatively simple prevention methods can have significant impact on indices like attitudes and self-report of future behavior. No specific curriculum for AOD prevention was used; rather, the methods of this study were designed using general social learning and cognitive-behavioral models. In addition, the methods were designed with relevancy and convenience in mind.

The demonstration that prevention efforts can be effective on significant antecedents to heavy drinking and automobile mortality among American-Indian youth with different cultural and geographical backgrounds is indeed encouraging. This effect was also evident for the youth of mixed American-Indian, Hispanic, and Anglo heritage.

These results also support the use of collaborative efforts between and among tribal, intertribal, and Federal mental health, AOD abuse, and health personnel. Such collaboration was essential in providing a professional and culturally relevant camp experience.

Finally, work remains to be done from this effort. Followup data will be collected on as many camp subjects as possible. Planning for future collaborative efforts and the design of ever more effective prevention methods are under way.

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# Prevention and Early Intervention Through Peer Support Retreats

*Peggy Glider, Ph.D., Harry Kressler, and Gustavo McGrew*

## Program Description

Traditionally there have been two major approaches to reversing alcohol and other drug (AOD) use among young people. Primary prevention has attempted to promote personal growth before individuals are exposed to AOD use. Normally geared toward large general groups of preadolescents, these programs have aimed at enhancing self-esteem so that the recipients would be less likely to make damaging decisions regarding future AOD use. Outpatient counseling has been geared specifically to those young people who have already developed patterns for AOD problems. This treatment strategy attempts to break through the resistance that accompanies giving up a long-term habit.

It is characteristic of adolescents both to generally resist adult involvement in their lives and to specifically deny that their use of AODs is a problem. Consequently, most young people are resistant to seeking help for AOD problems. Stern et al. (1983) recommended the establishment of "proactive programs," which make greater efforts at contacting both younger and middle adolescents and their parents to provide information about potential problems and available services.

Research findings lead to the conclusion that a prevention/early intervention program must effectively address the issue of peers. They also suggest group services for youth, because such services provide a forum for discussing and improving peer relationships (Ball 1969; Gorsuch 1976; Graham et al. 1983; Johnston and O'Malley 1986; Kandel 1980; Kressler 1987).

Peer support retreats offer such an approach to AOD problems by providing services to youth who are on the threshold of making the decisions that could lead to long-term AOD problems. Peer support retreats have the advantage of focusing special attention on young people before they are burdened with the resistance and dependency that are fostered by long-term AOD use. Early adolescents may have just begun to experiment with AODs or have friendships with AOD users. These young people are likely to be undergoing specific situational crises such as parental divorce, death, or family AOD use. Prevention/early intervention enhances the problem-solving, decisionmaking, and assertiveness skills of adolescents so that they are able to handle constructively the extra pressure of their particular situations.

The retreat approach to learning is not new. It has been successfully used to improve youth leadership skills, to train youth to be peer counselors, and to train community volunteers to work with youth. The strength of this approach is the high level of interaction and involvement in a very concentrated period of time (NIDA 1985). The prevention/early intervention peer support retreat for gateway drug users is based on a social-cognitive skills training model.

Past research has shown that multiple activities within a condensed period of time are more effective than single weekly doses of prevention or early intervention (NIDA 1985). Typically these weekly programs are offered in the school setting, which poses two problems. First, students may reject the information or fail to see its importance in their own lives because it is presented in a setting that may already be negative for them. Second, squeezing prevention or intervention activities into a busy schoolday minimizes the amount of intensive training received by the youth.

The peer-support retreat approach circumvents these shortcomings. The retreat occurs outside school at a site chosen for its open and relaxing atmosphere. Removing students from their environment and placing them in an unfamiliar setting provides them with opportunities to reflect on their needs and problems.

The retreat approach is flexible in design, thus lending itself to many uses. Students who have begun experimenting with gateway drugs or have already established a pattern of AOD use are frequently labeled by adults as "bad influences" on the other students. The retreat focuses on these other students, providing them with skills to make appropriate choices in their own lives. The strength of peer pressure is dealt with in two ways: youth are helped to understand the phenomenon of peer pressure and how to resist it, and the part that they can play as positive peer role models is also emphasized.

Retreat activities include workshops focusing on interpersonal and intrapersonal communication skills, problem solving, decisionmaking, refusal skills, and AOD information. Although these workshops are designed to present specific information, they are conducted interactively through discussion, role playing, or other hands-on activities. Youth are encouraged to question and to share their thoughts and feelings. Listening to adults and peers discuss problems similar to their own can help students put their own problems into perspective. Throughout the retreat, emphasis is placed on getting to know oneself. An early activity has students draw and then discuss their "lifelines" (the highs and lows of their lives) and their expectations for the future. This lifelines activity helps participants to focus on who they are and where they come from. After the lifelines activity, students are asked to write but not mail an anonymous letter to their parents, expressing the thoughts and feelings that they have never been able to communicate to them. Expressing these feelings in writing opens the youth to discussing them during the remainder of the retreat. Toward the end of the retreat, participants are helped to write a commitment to a drug-free lifestyle, which is signed and witnessed by two peers. Individual short-term goals that promote a healthy, chemical-free lifestyle, are determined, and action plans to help students keep their commitments and meet their goals are developed.

### *Staff*

In addition to the project director, the staff consisted of one retreat coordinator (a Hispanic male) and two youth services specialists (one Hispanic female and one American-Indian female) representing the same gender and ethnic mix as the youth participants. Youth services specialists came from outside the schools and established relationships with students by being available in the school to talk or disseminate information. These specialists also worked with teachers and administrators, training them to recognize and work with gateway drug users or those at risk for experimentation or use. The youth services specialists and the coordinator organized and facilitated the 48-hour retreats, intensifying the instruction and interaction of the youth who participated.

In addition, three adolescent interns (one Hispanic male, one Hispanic female, and one American-Indian male) worked at each of the retreats. These interns, who were in the final stage of treatment for AOD use in a local therapeutic community, fulfilled a very special role at the retreats. The adolescent participants were much more open to discussing their problems with the interns than with the adult staff members. The interns provided an atmosphere of safety in which personal problems could be discussed. The interns also provided very forthright information about the destruction that AODs cause, because each of them had been involved with the law and had been in treatment for approximately 1 year.

## Evaluation Design

### *Hypothesis*

A 12-month demonstration project was funded by OSAP to evaluate the effectiveness of the peer support retreat model. The hypotheses tested were as follows:

1. Through intensive training in skills useful in coping with peer, parental, and societal pressures correlated with AOD use, youth will decrease AOD use and increase positive peer and parental relationships.

2. Youth will openly explore and discuss their thoughts and feelings in the safety of the retreat environment. Although youth are frequently encouraged to communicate, schools and many home situations do not provide a nonjudgmental, listening audience.

3. Behaviors correlated with AOD use such as dropping out of school, negative behaviors, and delinquency will be targeted and reduced in frequency.

## *Subjects*

One hundred eleven seventh-grade students in three middle or junior high schools in a large metropolitan area in the Southwest were selected to participate in the 2-day retreats (see table 21 for the demographic breakdown of the sample and table 22 for high-risk indicators). These schools were selected because of the high proportion of Hispanic students enrolled, high

**Table 21. Gender and ethnic breakdown of the study sample**

| Ethnic category | Male | Female | Total |
|---|---|---|---|
| American Indian | 7 | 7 | 14 |
| Hispanic | 41 | 40 | 81 |
| African American | 1 | 0 | 1 |
| White (non-Hispanic) | 7 | 8 | 15 |
| Total | 56 | 55 | 111 |

**Table 22. High-risk indicators of the study sample**

| High-risk indicator | Male | Female | Total |
|---|---|---|---|
| Child of a substance abuser | 38 | 28 | 66 |
| Victim of abuse (sexual, physical, psychological) | 4 | 5 | 9 |
| Attempted suicide | 0 | 1 | 1 |
| Violent/delinquent behavior | 20 | 4 | 24 |
| Severe psychological/emotional problems | 8 | 3 | 11 |
| Economically disadvantaged | 52 | 44 | 96 |
| Latchkey child (12 years or younger) | 4 | 7 | 11 |
| Youth AOD user | 56 | 55 | 111 |

levels of AOD use or correlates to use (e.g., AOD referrals and suspensions or delinquent behaviors, high absenteeism, low socioeconomic status of a majority of the families, dysfunctional families), and the principal's interest and willingness to participate in the project.

## *Instruments*

*Attitude Survey:* The attitude survey was used as a screening instrument from which the sample and control groups were drawn. It consisted of basic demographic information, the Rosenberg Self-Esteem Scale, and a self-report of AOD use and attitudes (alcohol, tobacco, marijuana, inhalants, and caffeine). Students were instructed not to write their names on these forms. Initials and birth dates were used as identifiers to assign a research identification number.

*Retreat Pretest and Posttest:* A 28-question pretest covering family relationships, peer relationships, attitudes about school, attitudes about cultural belonging (acceptance), and AOD knowledge was constructed by the project director, the retreat coordinator, and the youth services specialists. Each item was scaled from 1 (strongly disagree) to 5 (strongly agree). Items were selected on the basis of topics to be worked on during the retreat. In addition to repeating the 28 pretest items, the posttest also contained 4 open-ended questions: (1) What did you like best about the retreat? (2) What did you like least about the retreat? (3) What kinds of emotions did you experience during the retreat? and (4) What did you learn during the retreat that you think will help you in the future?

*Followup Survey:* The attitude survey and the 28-item retreat pretest were combined to form the longitudinal followup survey. This survey was designed to be administered at 6-month intervals over a 2-year period.

*Parent Survey:* A 12-item questionnaire focusing on parents' perceptions of change in their early adolescents was constructed by the project director and the retreat coordinator. The five-point Likert scale items (ranging from 1 = strongly disagree to 5 = strongly agree) asked parents about changes in their child's attitudes and behavior regarding school, family, peers, and AODs since the retreat. All parents were informed that their answers were confidential and would be identified only by their child's identification number written on the form (no names were to be given). This survey was sent to the parents 3 months after their child participated in the retreat. If the parent failed to return the questionnaire, the youth services specialists attempted to reach the parents by telephone to complete the survey.

*Staff Evaluation:* After each retreat, each staff member completed an evaluation form. For each activity, the staff were to discuss the following:

- approximate percentage of student participation,
- the most positive aspects of the activity,
- what part or parts of the activity did not go well and why,
- how the activity could be improved, and
- whether all the objectives for the activity had been met.

Staff were also asked to discuss their overall impressions of the retreat.

## *Procedures*

*Sample Selection:* All seventh-grade students in the three target schools were asked to complete the attitude survey. Parental permission forms were received from 82 percent of the parents. An additional 16 percent of the students chose not to participate in the survey, leaving a sample of 451 students from which to draw the retreat participants and the control group for the study.

Retreat participants were chosen only on the basis of the AOD and attitude questions in the attitude survey. Students who said they had experimented or thought they would like to try one or more of the drugs and reported using all of them fewer than three times in the past month were labeled "experimenters." Students who said they had experimented with one or more of the drugs, would use them again, and reported use of four or more times for any one drug (other than caffeine) in the past month were labeled "pattern users." All students who reported never having tried any of the drugs and having no intention of trying any of them were labeled "nonusers." The three lists were shown to the youth services specialists for verification of the categories. There was 89-percent agreement across the 451 students. When there was a disagreement, students were recategorized on the basis of counselor knowledge.

From the finalized lists, 30 experimenters and 15 pattern users were randomly selected for each school's retreat sample; a control sample, matched for gender and ethnicity, was also selected. Through a written letter and a followup call by the youth services specialists, parents gave their permission for 97 percent of the selected youths to participate. The selection and parental permission process was repeated to fill the empty slots. The letter to parents explained the purpose of the retreats and the evaluation, which would require both child and parent to answer questions during the next 2 years. (The letter to the control group simply asked permission to administer questionnaires to the students over the next 2 years.) From the retreat sample, 10 experimenters and 5 pattern users from each school were randomly assigned to each of the retreat dates. Nine of the retreat sample students cancelled at the last minute and replacements were not possible; thus the actual sample size was 111 instead of the 120 anticipated.

*Retreat Procedures:* At the beginning and the end of each retreat, the retreat pretest and posttest were administered. All students were informed that their answers were strictly confidential and would be identified only by a number already written on the exam.

*Followup:* Two weeks after each retreat, participants were brought back together for a followup group counseling session. These sessions were designed to keep the peer support network strong and to help keep the lines of communication open between the youth services specialists and the students. This time was also used to monitor progress made by individuals in meeting their short-term goals and commitments. Additional monthly followup groups were held for 3 months. Students were helped in setting long-term goals for an AOD-free lifestyle and in determining how best to meet these goals. All participants were encouraged to become involved in other group or individual counseling and AOD-free activities.

## Results

Change scores on the preretreat and postretreat evaluations were analyzed with a series of chi-square tests. Gender, ethnicity, and level of AOD use (i.e., Experimenter versus Pattern User) were examined as independent variables. Items on the instrument included five specific areas in which attitude was expected to change because of the retreat content and activities: family, peers, AODs, school, and culture. Additional chi-square analyses were run to evaluate change scores in each of the five areas. Gender, ethnicity, and level of use were included as independent variables for the total score. The results are shown in table 23.

With gender as the independent variable, statistically significant changes between preretreat and postretreat scores were found for the total instrument ($p < .05$) and for the family ($p < .025$), drugs ($p < .05$), and culture ($p < .025$) components. For the total gender scale and the family component, the change was in a negative direction, with males answering more negatively than females. For the drug and culture components the change was positive, with females accounting for most of it.

Change scores for the drug ($p < .05$) and culture ($p < .025$) components were also significant when analyzed with ethnicity as the independent variable. Both American Indians and Hispanics accounted for much of this change, with little difference between these two groups. When level of use was the independent variable, only culture ($p < .05$) was statistically significant; experimenters answered more positively than pattern users. All three of these last significant findings were in the direction of positive change. Although the

**Table 23. Chi-square analysis of change scores by gender, ethnicity, and level of use**

| Variable | Chi-square | |
|---|---|---|
| | Gender* | |
| Family | 7.905 | .025 |
| Peers | 1.200 | NS |
| Drugs | 7.080 | .050 |
| School | 1.415 | NS |
| Culture | 7.720 | .025 |
| Subtotal | 6.640 | .050 |
| | Ethnicity+ | |
| Family | 6.81 | NS |
| Peers | 4.38 | NS |
| Drugs | 13.37 | .050 |
| School | 10.43 | NS |
| Culture | 15.57 | .025 |
| Subtotal | 9.72 | NS |
| | Level of use* | |
| Family | 4.01 | NS |
| Peers | 3.06 | NS |
| Drugs | 1.98 | NS |
| School | .54 | NS |
| Culture | 7.01 | .050 |
| Subtotal | 3.71 | NS |

NOTE: NS = not significant.

*Chi-square df = 2.

+Chi-square df = 6.

changes on the items in the peer and school components were nonsignificant for all comparisons, in each analysis the scores reflected a negative change.

The general comments on the retreat posttest were very favorable. The activities mentioned most often as the best part of the retreats were the games, the lifelines activity, and the open and honest discussions among peers. The least favorable aspects were sitting still and having to leave. More than 50 percent said that there was nothing they did not like about the retreats. When asked what kinds of feelings the retreat brought out, 86 percent mentioned a range of feelings including joy, sadness, fear, and anger. Seventy-six percent reported that the retreats pointed out their need to learn to deal with life without using AODs. Other frequent comments included being more aware of their own and others' feelings (67 percent) and learning to communicate more honestly with their families and peers (52 percent).

Changes in self-esteem and self-reported AOD use between the attitude survey and the followup survey (administered at the 3-month followup group) were also analyzed using the Student's $t$ statistic. Both changes were statistically significant at the $p < .0001$ level ($t = 9.00$ for AOD use and $t = 3.67$ for self-esteem), with no significant differences on the basis of gender or ethnicity. At the first followup group, 81 percent ($n = 90$) of the participants reported keeping their chemical-free commitment. One girl expressed the difficulty of that commitment as follows: "I wanted a drink. I really wanted a drink. Mom was gone and I knew I could, but then I pictured Ann [her friend—not the real name—who had witnessed her commitment at the retreat] and I knew I couldn't do it. I couldn't let her down."

Such comments were frequent in the groups as students openly discussed the difficulty of keeping their commitments. At the 3-month group, 71 percent ($n = 79$) of the students still reported success in remaining chemical free. For those who did break their commitment, 92 percent ($n = 29$) reported smoking only one cigarette or having one beer. Then, because of feelings of guilt about breaking their commitment and letting their friends down, they made a new commitment to be chemical free. Students also demonstrated more positive attitudes about themselves, school, peers, and their families. Many students expressed the feeling that they were better equipped to deal with problems at home and with peer pressures at school and in their neighborhoods.

Staff evaluations of the retreats were very positive and enlightening. Percentage of student participation ranged from 85 percent on the most cognitive activity to 100 percent on the most interactive activities, especially the lifelines and positive reinforcement activities. Staff felt that the objectives of each activity had been consistently met and that each activity had been responded to with positive feelings.

Response from parents was fairly poor. Only 19 percent returned the survey. Another 42 percent were contacted by telephone by the youth services specialists. Parents reported positive changes in attitudes regarding school (66 percent), home (59 percent), peers (88 percent), and AOD use (87 percent). Positive changes in behavior were also reported for school (66 percent), home (59 percent), and peers (88 percent). It was interesting that 96 percent of the parents reported that their child never smoked, drank, or used any other drugs.

In anecdotal data from school personnel, teachers have reported better attendance, more regularity in completing assignments, and more class participation from a majority of the retreat participants (69 percent). All three schools have also reported a decrease in referrals for AOD use and negative behaviors (ranging from 4 percent to 7 percent).

## Discussion and Recommendations

Although it is difficult to know for certain what the negative change scores on the family component and overall evaluations mean, one plausible explanation is based on the nature of the retreat activities. Students were asked to examine their thoughts and feelings about these subjects. This examination took place over a very concentrated period of time with ongoing feedback from other retreat participants and staff. The posttest scores may have reflected the vulnerability students felt after a 48-hour retreat and a more realistic picture of intensely examined attitudes. To know whether this picture is indeed more accurate, and whether it can be translated into actions that help the student learn to change negative perceptions without AOD use will require followup over a period of time. The positive changes on the drug component represent more accurate knowledge about AODs and less positive attitudes about even casual use. The culture component consistently yielded positive changes reflecting more pride in cultural background. Both negative and positive change scores represented immediate positive results from the retreat.

The changes in self-esteem and level of self-reported AOD use from the attitude survey given before sample selection and the 3-month followup survey demonstrated some longer term accomplishments of the retreat. The true test of the retreats was to come at the 6-month followup session, when both the retreat participants and the control group would be surveyed again. This followup point was very important because it was to occur after summer vacation, a time when adolescents are often with peers and generally unsupervised by adults.

A very positive part of the retreats was the use of the adolescent interns. These youths were able to reach out to the participants in a way that the adult staff could not. The use of the interns decreased the staff to participant ratio to 1 to 3. It provided the desired support for the students and bridged the gap between adult and child without overshadowing peer interactions. Even after the retreat, 27 of the participants telephoned the interns, primarily when they were having difficulty keeping their commitments to live drug free.

A major weakness of the project was the lack of parental involvement. Although change in the adolescents' knowledge, attitudes, and behaviors seemed to have resulted from the retreats, these changes were being made within a family context. Unfortunately, many of these families were not necessarily knowledgeable about how to meet their children's needs regarding AOD use and other related behaviors. As mentioned in the "Results" section, 96 percent of the parents responded that their child did not use any AODs. This response reflected either a lack of information on the parents' part or a denial of the evidence. The retreats are likely to be much more far reaching if the staff can work with the parents to teach them the coping and communication skills that will help in interactions with their children.

The project was to continue with 6-month followup evaluations until the participants are in ninth grade (freshmen in high school, in the local school system). All three of the schools were also eager to have the retreats continue. To this end, they contracted with the prevention-intervention agency to provide retreats and support services on a fee-for-service basis.

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# The Smart Leaders Booster Program: A Pennsylvania State University and Boys Clubs Prevention Project

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## Program Description

The Smart Leaders program is a 3-year booster program developed by Pennsylvania (Penn) State University and currently being implemented in five Boys Clubs across the country. The goal of the Smart Leaders booster program is to delay the onset of alcohol and other drug (AOD) use and teenage sexual activity among the youth in high-risk environments who constitute membership in the Boys Clubs of America (BCA). Smart Leaders is designed specifically for BCA youth aged 14 to 16 who have completed Stay Smart, a 12-session, small group prevention program for 13-to 15-year-olds. Stay Smart is part of BCA's national prevention program Smart Moves, developed by BCA in 1986-87, and based on Botvin's (1983) Life Skills Training (LST) program.

Smart Leaders reinforces and builds on the skills and knowledge learned in Stay Smart and sustains Stay Smart's effects. Like Stay Smart, Smart Leaders uses a social skills training approach to teach youth social skills for resisting pressures from peers, the media, and other sources to use alcohol and other drugs and to engage in early sexual activity.

Several evaluation studies have indicated that the social skills approach is more effective than traditional prevention approaches because of its simultaneous impact on several related behavioral domains. For example, Botvin et al. (1984) reported significant effects of a social skills approach on smoking, alcohol use, and marijuana use. Schinke et al. (1979, 1980) found that an approach similar to the one used in preventing cigarette smoking was also effective for changing variables related to the prevention of adolescent pregnancy.

Although social skills training approaches to AOD use prevention have demonstrated initial program effectiveness, and in some cases continued effectiveness a year later (NIDA 1983), program effects do erode over time (NIDA 1985b). This erosion suggests that continued intervention is needed to sustain behavioral change through the high school years. As initial program effects erode and youth progress through junior and senior high school they become increasingly at risk for trying different substances and activities associated with new developmental levels and environmental influences (NIDA 1985a).

Few programs have continued intervention by adding booster sessions to an initial prevention program to sustain behavioral change into the high school years. Although evidence exists that additional hours of instruction increase the effects for knowledge, attitudes, and practices, and that booster sessions have maximized the effectiveness of initial prevention programs, there have been few actual evaluations of booster sessions (Botvin 1983; Connell et al. 1985).

Although Smart Leaders is a booster program, it is presented to the BCA youth as a peer leader training program that prepares them to assume club leadership roles in assisting their peers to resist pressures to use alcohol and other drugs and become involved in early sexual activity. Therefore, youth not only experience booster sessions, but they do so with the intention of using their skills and knowledge to help other club members.

Presenting booster sessions as a peer leader training program serves two important purposes. First, the approach helps maximize the ultimate positive outcomes of the overall prevention program. Evidence exists that youth gain more from a program led by their peers than they do from a program led by adults (Capone et al. 1973; Leupker et al. 1983; Sciacca and Seehafer 1986; Schaps et al. 1981; Tobler 1986; Tslah et al. 1982). Youth who are peer leaders continue to learn while teaching others, and teens involved in leadership roles in BCA'S prevention program are more likely to stay involved with the program and with BCA. Further, youth who are peer leaders and are looked up to by other BCA members feel special. This special recognition should contribute to each Smart Leader's sense of self-worth.

Second, the peer leader training approach to the booster sessions should help BCA carry on its overall prevention program. The Smart Leaders program will generate a pool of trained peer leaders who can assume a variety of leadership roles in BCA, through which they advocate the prevention philosophy, model the social skills learned in Smart Leaders, and assist their peers in resisting AOD and sexual pressures. Because the Smart Leaders program distinguishes the teens as special, and because of other tangible incentives, it will be easier to first recruit and then retain the youth through the entire 3 years of Smart Leaders.

Smart Leaders comprises three levels of peer leader training: Smart Leaders 1, Smart Leaders 2, and Smart Leaders 3. Members move to the next level each successive year. Each level consists of two components: (1) small group sessions and (2) involvement in the Smart Moves prevention program activities. As the teens progress through the three levels, they become increasingly qualified and experienced in working with the Smart Moves program. Over time, BCA will increase its pool of Smart Moves leaders, and the positive peer influence environment of the club will encourage all club members to resist social pressures toward AOD use and early sexual activity.

## Staff

One Boys Club staff member at each of the five demonstration sites was made leader of the Smart Leaders 1 small group sessions and coordinated all the other activities related to the program. These activities included recruiting, pretesting and posttesting, and overseeing the Smart Moves involvement activities. In addition, these five leaders and one additional staff member from each club participated in an inservice training workshop offered by Penn State before the Smart Leaders program was launched. Each of the leaders also participated by telephone in regularly scheduled process evaluation interviews with members of the Penn State project team.

Four of the five leaders were full-time staff in their respective clubs. The other individual was employed elsewhere full time but worked as a part-time consultant for the club and had full responsibility for the prevention program. The leaders' other job responsibilities in their clubs varied, but all were responsible for a wide range of tasks in addition to being in charge of the Smart Leaders program. Four of the five leaders were male, three were African American, and two were White. Two leaders were unit directors of their clubs and one was a social recreation director. Just one leader had as his primary responsibility the club's prevention program, but he also had several other responsibilities.

## Evaluation Design

### *Subjects*

Fifty young people completed the pretest for the year 1 Smart Leaders 1 program. The majority of the participants (74 percent, or 37 youths) were boys. The group included 16 White youths, 8 Hispanics, 24 African-American youngsters, and one participant who did not indicate ethnicity.

Although the designated age range for participating was 14 to 16, the actual ages ranged from 13 to 17; the majority were aged 14 and 15. The younger youths participated because they had already completed the Stay Smart program, and several were about to have a birthday. Similarly, the older youths had just turned 17 or were somewhat older when they completed Stay Smart.

Participants came from a population with high-risk backgrounds where potential for AOD use and adolescent pregnancy was higher than average. This profile was true primarily because BCA is a national youth agency the primary mission of which is to serve boys and girls from disadvantaged circumstances. The following demographic profile of BCA members illustrates this point:

- 71 percent live in urban areas,
- 47 percent come from single parent families,
- 29 percent are from families receiving public assistance,
- 49 percent are from families with parents working in blue-collar or factory jobs,
- 77 percent are from families with three or more children,
- 51 percent are from ethnic/racial families,
- 66 percent are from families with annual incomes under $15,000, and
- 15 percent are from families with annual incomes between $15,000 and $20,000.

### *Procedures*

The quasi-experimental design consists of three groups: Smart Leaders participants and two control groups. Control group A will have only the Stay Smart program without the Smart Leaders booster; control group B will have no prevention program at all. The evaluation will compare program effects yearly and longitudinally over 3 years for youth who experienced both Stay Smart and Smart Leaders, youth who experienced only Stay Smart, and youth who participated in no prevention program.

Two prevention programs were offered at the five demonstration clubs in year 1: (1) Smart Leaders 1, to youth who had completed Stay Smart the previous year, and (2) Stay Smart, to a new group of 13-to 15-year-olds. The plan is for the Smart Leaders 1 youth to progress to Smart Leaders 2 and 3 in years 2 and 3. Similarly, year 1's Stay Smart youth will move into Smart Leaders 1 in year 2 and into Smart Leaders 2 in year 3. The new group of Stay Smart youth that is formed in year 2 will progress to Smart Leaders 1 in year 3.

Stay Smart participants at the control group A clubs will not go on to Smart Leaders. Instead, the year 1 Stay Smart completers will only continue to be tested in years 2 and 3. The year 2 Stay Smart participants will experience only testing during year 3.

Control B youth will be tested yearly, with a new group to be added in year 2. In year 3 all the control B youth from years 1 and 2 will be tested.

After 3 years of pretest and posttest data have been collected, all data will be analyzed to determine behavioral outcomes from year to year comparing the three groups. These results will show whether Smart Leaders participants exhibited (a) a slower rate of onset of AOD use, (b) a slower rate of onset of sexual activity, (c) greater knowledge of the consequences of AOD use and teenage sexual activity, and (d) less behavioral intent to use alcohol and other drugs and engage in sexual activity than control groups A and B. Data also will be compared among the three groups to determine differences in perceptions of social skills, attitudes toward using alcohol and marijuana, and attitudes toward teen sexual activity.

A process evaluation is also being conducted. Indepth telephone interviews are conducted with the group leaders after each Smart Leaders session. These data provide valuable information about the implementation of the program at each site. In addition, project staff will make at least one visit per site during each year of the program to observe a Smart Leaders session. Observations of each session by project team members, systematic telephone process interviews for each session at each club with group leaders, and a final year 1 group leader workshop provided the input necessary to revise and improve the Smart Leaders 1 pilot program.

## Year 1 Evaluation

The results reported in this document focus on the pretest (time 1, at the beginning of year 1) and posttest (time 2, at the end of year 1) findings for the year 1 Smart Leaders participants.

The year 1 Smart Leaders 1 program was designed and viewed as a pilot program because the project team believed that Smart Leaders program would benefit from a year of careful examination before being implemented as part of the quasi-experimental design with the two control groups.

Developing, refining, and revising the Smart Leaders 1 program, and testing the Smart Leaders participants and the two control groups during year 1 have paved the way for a full-scale evaluation of the Smart Leaders program in year 2. That evaluation will compare the three groups to determine differential program effects.

### *Instruments and Data Collection*

The pretest and posttest data presented in this document were gathered by means of a questionnaire. In addition to some basic demographic information, the questionnaire provided information on the respondents' perceptions of their social skills and their knowledge, attitudes, behavioral intentions, and current level of AOD involvement and sexual activity. The questionnaire was developed by the project team; many of the individual items were adapted from the Cornell University Medical School Health Survey (Botvin et al. 1984). Before its use in this evaluation, the questionnaire was pilot tested at 14 Boys

Clubs and was examined for content and face validity by experts in the AOD use prevention field.

*Social Skills.* The social skills scale consisted of 10 items asking participants to rate how well they can do something, such as starting up a conversation with someone they do not know, giving a compliment, disagreeing with someone, asking someone for a favor, or saying no to a request they think is unfair. Participants were asked to rate themselves on a 4-point scale (1 = "lousy," 2 = "okay," 3 = "good," 4 = "great"). The ratings for all 10 items were averaged for a social skills score that could range from 1 to 4. Item analysis indicated reasonable internal reliability of the total scale (Cronbach's alpha = .64), with individual items functioning relatively well.

*Knowledge.* Knowledge in the areas of sex, alcohol, tobacco, and marijuana was assessed by means of a 32-item true-false test that dealt with information covered in the prevention program. Items included statements such as, "Most people my age smoke cigarettes," "Alcohol tends to pep a person up," "Smoking marijuana improves short-term memory," and "Most teens under the age of 16 are not having sex." Scores could range from 0 to 32.

*Attitudes.* Attitudes were assessed in three areas—sex, alcohol use, and marijuana use—with two 10-item scales and one 11-item scale that elicited participants' level of agreement with statements such as "Teenagers who drink alcohol have more friends," "There is nothing wrong with smoking marijuana," and "Having sex shows you are more grown-up." Participants responded to each item on a 5-point scale ranging from "Strongly disagree" to "Strongly agree." Reversed items were reverse-scored, and the individual's attitude score was the average across the 10 or 11 items, with 1 corresponding to the most negative possible attitude and 5 corresponding to the most positive.

Item analyses indicated that internal reliability of the attitude-toward-alcohol scale and the attitude-toward-marijuana scale were acceptable (Cronbach's alpha = .65 and .67, respectively). The attitude-toward-teen-sex scale had a noticeably higher reliability (alpha = .89).

*Behavior and Behavioral Intentions.* Behavior and behavioral intentions were assessed through a series of questions in six areas: drinking, marijuana smoking, cocaine use, cigarette smoking, use of chewing tobacco or snuff, and sexual intercourse. In each of these areas, participants were asked how often (if ever) they had been involved in the activity and how recently. With regard to drinking, they were also asked what they drank and how much. In all six areas they were also asked if they thought they would be involved in such activities 2 years later and if they thought they could refuse an offer to participate.

## Results

These results are from 44 matched pretests and posttests of youth who completed the pilot program of Smart Leaders 1 at the five Boys Clubs demonstration sites (Clubs A, B, C, D, and E). These findings provide descriptive information; they do not allow us to draw overall conclusions about the effects of the pilot program.

### *Social Skills*

In general, these young people felt fairly good about their social skills. Their average score was between 2 and 3, scores that represent "okay" and "good" on the 4-point response scale. Analysis of variance for the social skills scale indicated no significant change in scores from pretest to posttest and no difference among the five demonstration sites. No site had a change of more than one-tenth of one point on the 4-point scale (no data presented).

### *Knowledge*

Although it appears from the overall knowledge scores at pretest and posttest that the Smart Leaders 1 program had no effect on participants' knowledge in the areas measured by the 32-item true-false test (an average decrease of 0.21 points), there were fairly dramatic differences in impact across sites. (The site-times-time interaction effect was statistically significant: $F = 5.07$, $p = .002$.) Club C showed a clear increase in knowledge (+4.29 points); there was little or no change at club E (+1.36) and club A (+0.19), and there were clear negative effects at club B (-3.00) and club D (-4.37). The average score for the five clubs combined was 21.9 (or 68 percent correct) at pretest and 21.7 (68 percent correct) at posttest.

### *Attitudes*

Although no significant overall change was found from pretest to posttest in attitudes toward alcohol and marijuana, the youth had generally more negative than positive attitudes toward alcohol and marijuana. Their average posttest scores as a group were 1.86 on the 5-point alcohol attitude scale and 1.75 on the 5-point marijuana attitude scale. Analyses of variance for all three attitude scales indicated no difference in effects among the clubs.

There is a caveat, however, concerning the lack of a control group for comparison with the Smart Leaders 1 youth. It is possible that adolescents at this age are generally developing positive attitudes toward alcohol and marijuana, and that the Smart Leaders 1 participants were in a sense holding the line against the predominantly pro-AOD influences of the general environment. Without a control group for comparison in year 1, the emphasis here must be on differences among sites rather than on overall effectiveness, and there appear to be none.

Although no differences were found among the sites with regard to changes in attitudes toward sex, there was a statistically significant overall shift in the negative direction ($F = 9.64$, $p = .004$). The sex attitude scale is focused on beliefs about the social advantages of being sexually active and a view of sexual activity as honorific. Thus, a shift in the negative direction does not imply negative feelings about the role of sex in marriage or in other committed relationships.

## *Behavioral Intentions*

The two behavioral intentions measures (intended behavior in 2 years and perceived ability to refuse participation) did not appear to change during the course of the program, nor did any significant differences appear across clubs. There were, however, clear differences among the various activities with respect to intentions. For example, at posttest (see table 24) the following percentages of Smart Leaders 1 participants reported that they definitely or probably would not be engaged in the activity in question in 2 years: drinking alcohol, 61.4 percent; smoking marijuana, 81.8 percent; using cocaine, 97.7 percent; smoking cigarettes, 77.3 percent; using chewing tobacco or snuff, 95.4 percent; and having sexual intercourse, 15.9 percent. Most of these youth began and ended the program year with intentions not to engage in the named activities except for sexual intercourse; at pretest and posttest, 52 percent of the participants said they thought they definitely or probably would be having sexual intercourse in 2 years.

A majority of these young people reported at both pretest and posttest that they were sure they could, or thought they probably could, refuse the following drugs if offered by a friend (see table 25). The posttest percentages were as follows: beer, 72.7 percent; marijuana, 81.8 percent; cocaine, 88.6 percent; cigarettes, 77.3 percent; and chewing tobacco or snuff, 79.5 percent. Sexual activity was another matter. The number of youth who were sure they could, or thought they probably could, refuse having sex with their girlfriend or boyfriend were about the same at pretest (16 or 36.3 percent) and posttest (17 or 38.6 percent) but was generally much smaller than the number who thought they could refuse alcohol and other drugs.

## *Behavior*

It is difficult to draw any firm conclusions concerning behavior change for the Smart Leaders 1 participants year 1. Overall, levels of involvement with the behaviors at issue changed very little from pretest to posttest. Although club C appeared to be the only site with consistent reductions in AOD- and

Table 24. Two-year intentions for Smart Leaders 1 participants, time 1 and time 2 (*N* = 44 matches)

| Behavior | Time 1 | | Time 2 | |
|---|---|---|---|---|
| | *n* | percent | *n* | percent |
| Alcohol | | | | |
| Definitely not or probably not | 24 | 54.6 | 27 | 61.4 |
| Maybe | 12 | 27.3 | 9 | 20.4 |
| Definitely will or probably will | 8 | 18.2 | 8 | 18.2 |
| Marijuana | | | | |
| Definitely not or probably not | 38 | 86.3 | 36 | 81.8 |
| Maybe | 3 | 6.8 | 4 | 9.1 |
| Definitely will or probably will | 3 | 6.8 | 4 | 9.1 |
| Cocaine | | | | |
| Definitely not or probably not | 40 | 90.9 | 43 | 97.7 |
| Maybe | 0 | 0.0 | 1 | 2.3 |
| Definitely will or probably will | 3 | 6.8 | 0 | 0.0 |
| Cigarettes | | | | |
| Definitely not or probably not | 35 | 79.5 | 34 | 77.3 |
| Maybe | 5 | 11.4 | 3 | 6.8 |
| Definitely will or probably will | 3 | 6.8 | 6 | 13.6 |
| Chewing tobacco or snuff | | | | |
| Definitely not or probably not | 39 | 88.6 | 42 | 95.4 |
| Maybe | 2 | 4.5 | 0 | 0.0 |
| Definitely will or probably will | 2 | 4.5 | 1 | 2.3 |
| Sexual intercourse | | | | |
| Definitely not or probably not | 8 | 18.2 | 7 | 15.9 |
| Maybe | 12 | 27.3 | 14 | 31.8 |
| Definitely will or probably will | 23 | 52.3 | 23 | 52.3 |

NOTE: Columns may not add to 100 percent owing to rounding and missing responses.

sex-related behaviors, the differences from other clubs were not large enough to suggest a firm conclusion (see table 26). The findings showed that as a group, a majority of the Smart Leaders 1 teens reported at posttest that they had ever engaged in three of the behaviors in question: drinking alcohol (79.5 percent), smoking cigarettes (61.4 percent), and having sexual intercourse

**Table 25. Ability of Smart Leaders 1 to refuse substances and sex, time 1 and time 2 ($N$ = 44 matches)**

| Behavior | Time 1 |  | Time 2 |  |
|---|---|---|---|---|
|  | *n* | percent | *n* | percent |
| Beer |  |  |  |  |
| Sure I could not or probably could not refuse | 6 | 13.6 | 7 | 15.9 |
| Not sure | 9 | 20.5 | 5 | 11.4 |
| Sure I could or probably could refuse | 29 | 65.9 | 32 | 72.7 |
| Marijuana |  |  |  |  |
| Sure I could not or probably could not refuse | 8 | 19.8 | 6 | 13.7 |
| Not sure | 4 | 9.1 | 2 | 4.5 |
| Sure I could or probably could refuse | 32 | 72.7 | 36 | 81.8 |
| Cocaine |  |  |  |  |
| Sure I could not or probably could not refuse | 5 | 11.4 | 3 | 6.8 |
| Not sure | 1 | 2.3 | 2 | 4.5 |
| Sure I could or probably could refuse | 37 | 84.1 | 39 | 88.6 |
| Cigarettes |  |  |  |  |
| Sure I could not or probably could not refuse | 7 | 15.9 | 8 | 18.2 |
| Not sure | 4 | 9.1 | 1 | 2.3 |
| Sure I could or probably could refuse | 32 | 72.7 | 34 | 77.3 |
| Chewing Tobacco or Snuff |  |  |  |  |
| Sure I could not or probably could not refuse | 5 | 11.4 | 7 | 15.9 |
| Not sure | 2 | 4.5 | 1 | 2.3 |
| Sure I could or probably could refuse | 36 | 81.8 | 35 | 79.5 |
| Sexual Intercourse |  |  |  |  |
| Sure I could not or probably could not refuse | 12 | 27.3 | 18 | 40.9 |
| Not sure | 15 | 34.1 | 9 | 20.4 |
| Sure I could or probably could refuse | 16 | 36.3 | 17 | 38.6 |

NOTE: Columns may not add to 100 percent owing to rounding and missing responses.

(70.5 percent). Fewer of the Smart Leaders 1 participants indicated that they had ever engaged in smoking marijuana (36.4 percent), using cocaine (2.3 percent), and using chewing tobacco or snuff (27.3 percent).

**Table 26. AOD- and sex-related behaviors of Smart Leaders 1 at pretest (T1) and posttest (T2) ($N = 44$ matches)**

| Behavior | A ($n$=7) | | B ($n$=7) | | C ($n$=7) | | D ($n$=8) | | E ($n$=11) | | Total (with percent) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | T1 | T2 | T1 | T2 | T1 | T2 | T1 | T2 | T1 | T2 | T1 | T2 |
| Alcohol | | | | | | | | | | | | |
| Ever* | 11 | 10 | 6 | 5 | 7 | 6 | 3 | 5 | 9 | 9 | 36 (81.8) | 35 (79.5) |
| Past 30 days | 3 | 7 | 5 | 4 | 4 | 1 | 3 | 3 | 2 | 2 | 17 (38.6) | 17 (38.6) |
| Marijuana | | | | | | | | | | | | |
| Ever | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 4 | 4 | 3 | 14 (31.8) | 16 (36.4) |
| Past 30 days | 2 | 1 | 2 | 3 | 1 | 1 | 1 | 2 | 1 | 1 | 7 (15.9) | 8 (18.2) |
| Cocaine | | | | | | | | | | | | |
| Ever | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 3 (6.8) | 1 (2.3) |
| Past 30 days | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 (0.0) | 1 (2.3) |
| Cigarettes | | | | | | | | | | | | |
| Ever | 7 | 6 | 4 | 4 | 7 | 7 | 3 | 3 | 5 | 7 | 26 (59.1) | 27 (61.4) |
| Past 30 days | 2 | 4 | 0 | 0 | 4 | 3 | 1 | 1 | 1 | 1 | 8 (18.2) | 9 (20.5) |
| Snuff/Chew | | | | | | | | | | | | |
| Ever | 1 | 2 | 0 | 1 | 3 | 4 | 0 | 1 | 3 | 4 | 7 (15.9) | 12 (27.3) |
| Past 30 days | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 (4.5) | 2 (4.5) |
| Sex | | | | | | | | | | | | |
| Ever | 7 | 9 | 7 | 7 | 3 | 4 | 6 | 7 | 6 | 4 | 29 (65.9) | 31 (70.5) |
| Past 30 days | 3 | 3 | 4 | 5 | 1 | 0 | 5 | 7 | 3 | 2 | 16 (36.4) | 17 (38.6) |

NOTE: Columns may not add to 100 percent owing to rounding and missing responses.

*The slight decrease in percentage ever having engaged in this behavior is probably owing to 22 participants who skipped this question at time 1 and time 2.

Also shown in table 26 are the reported levels of involvement in the various behaviors in the 30 days before the posttest: drinking alcohol, 38.6 percent; smoking marijuana, 18.2 percent; using cocaine, 2.3 percent; smoking cigarettes, 20.5 percent; using chewing tobacco or snuff, 4.5 percent; and having sexual intercourse, 38.6 percent. Again, the changes from pretest to posttest were small and the differences among the clubs, except for club C, were not large enough to suggest any definite conclusions concerning the effectiveness of the Smart Leaders 1 pilot program.

## Summary

The Smart Leaders 1 program was pilot tested during year 1 of the project, and the groundwork was laid for conducting a full-scale program evaluation in years 2 and 3 using a quasi-experimental design with two control groups. Although no firm conclusions could be drawn concerning the effectiveness of the Smart Leaders 1 program in year 1 because the program had no control groups, the descriptive data were encouraging. In general, youth who participated in Smart Leaders 1 did not change on most measures from before the program year to after, suggesting that they were "holding the line" on their AOD involvement and sexual activity. In addition, the youth had more negative than positive attitudes toward the use of alcohol and marijuana, and those attitudes were maintained from before the program year to after. Sexual activity was the only behavior the majority of program participants were unable to say they would not be engaging in 2 years later.

Overall, although these data were not conclusive regarding the program's effectiveness, they provided some indication that the youth who completed the Smart Leaders 1 program were continuing to delay further involvement with AODs and teenage sexual activity, which is the goal of this booster program.

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# Impact: An Early Intervention Demonstration Project

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## Program Description

Project Impact, an early intervention demonstration project, was designed and implemented as an innovative high school prevention program targeting students who showed early involvement with gateway drugs. The primary purpose of Impact was to assist school personnel through formal training and technical assistance, and to assess individual school and community needs associated with adolescent alcohol and other drug (AOD) use.

Theories concerning the etiology of AOD abuse are abundant in the research literature; however, few appear to have much direct relevance to the development of effective prevention strategies. Both social learning theory (Bandura 1977) and problem behavior theory (Jessor and Jessor 1977), however, do provide a conceptual framework for understanding the origins of drug abuse.

From these theories one can understand that AOD is conceptualized as a socially learned, purposeful, and functional behavior (Blum et al. 1978; Schiffman and Wills 1985). The literature notes that adolescents are motivated to use AOD as a way of coping with expected failure or as an alternative way of achieving a particular goal. The use of certain AODs has been tied to low self-esteem and low social status (Gold and Coghlan 1976; Rotter 1972). Other adolescents use AODs to cope with anxiety or to appease the social pressure of their peers (Collins & Marlatt 1981). Clearly, any effective approach to preventive intervention for youth at early stages of AOD involvement must address the motivational issues for AOD use, provide youth with the necessary skills to resist social pressure, and clarify ways to cope with life's stressors more effectively.

The public health approach to AOD use prevention provides a useful perspective in the implementation of a community demonstration project such as Impact (Johnson et al. 1988). The approach is based on sound theoretical principles and direct application to service delivery. The Impact demonstration project is based on a community intervention model and is derived from social learning theory (Bandura 1986; Jessor and Jessor 1977) used in the context of the public health model of agent, host, and environment (Nathan 1983). The importance of the three components—agent (AODs), host (the individual), and environment (family, society, school, and reinforcing factors)—is well documented in the research literature (Bacon 1978; Lauzon 1977). The philosophy of a public health prevention model is that a community improves the health-related behaviors of its citizens by considering the roles of the agent, the host, and the environment, and the interaction of all three within a prevention triad (Johnson et al. 1988).

## *The Training*

Project Impact seeks to integrate learning theory and problem behavior theory in a practical application of the public health model. The program includes encouraging the establishment of

- formal AOD policies in the schools,
- training for adults in recognizing student behaviors indicative of AOD use problems,
- intervention skills for approaching the students and their families, and
- communication skills for involving the families and other community resource specialists.

Implemented in 12 Oregon high schools during fall 1987, Impact includes a 4-day, 40-hour intensive training program encompassing discussions about

- the etiology of AOD behavior,
- differential diagnostic skills to help participants identify students using AODs,
- the importance of communication in the prevention and intervention process,
- the concept of family systems intervention,
- information about communication and AOD prevention skills, and
- information about making referrals.

Although the Impact format emphasizes early intervention in gateway AOD use, the trainers also stress that, at that stage, the intervention process is only one component on a continuum of prevention. Encouraging positive AOD-free models in the school, at home, and in the community is emphasized, as is the importance of family and teacher communication with students in the prevention-intervention process.

The training is provided primarily to interested school personnel, but community members such as parents, clergy, counselors, social workers, and criminal justice workers are also encouraged to attend. After completion of the Impact training, a permanent core team of concerned school personnel is established in each high school to coordinate future AOD intervention and referral processes. From then on, the core teams are instructed to adapt other prevention-intervention techniques derived from the Impact training, such as peer support groups or re-entry programs for recovering students. Community liaison and prevention specialists continue to be available after the Impact training to help develop core teams and provide training to implement direct prevention-intervention efforts.

## Evaluation Design

### *Hypothesis*

It was hypothesized that teachers who participated in Impact training would perform better than two control groups of untrained teachers on several measures:

- confidence in their diagnostic skills to make referrals of youth in high-risk environments to evaluation and treatment,
- awareness of school AOD policies, and
- involvement with prevention activities.

Some additional hypotheses were developed during the process of instrument design and incorporation of new concepts:

- Families with "good" levels of communication exhibit less AOD use.
- Peer AOD use predicts self-use for students.
- Impact trainees prefer prosocial intervention strategies over punitive ones.
- Families with AOD problems prefer prosocial interventions.
- Stress experienced in the past year is a predictor of AOD use in the family.

### *Subjects*

Project Impact was targeted toward the 8,973 students in the 12 high schools of the Linn-Benton Education Service District, in western Oregon's Willamette Valley. The socioeconomic composition of Linn and Benton counties is middle class and predominantly White (93 percent). African Americans comprise less than 1 percent of the population, American Indians 0.8 percent, Asian/Pacific Island Americans 2.4 percent, and Hispanics 1.7 percent.

In November 1987, 74 teachers, administrators, and community leaders from the Linn-Benton Education Service District were randomly selected as participants in week 1 or week 2 of a 4-day, 40-hour intensive training program. Two control groups of teachers were also identified, one comprising

149 teachers from the same district and the other comprising 173 teachers from a similar district in another county.

### *Procedures*

During the first training session, questionnaires were administered to the participants; at approximately the same time, researchers distributed the same questionnaire to the two control groups. Ninety-three percent of the participants and approximately 70 percent of the control groups completed the questionnaires. At the posttest given approximately 7 months after training, 66 percent of the trained participants, 68 percent of the same-district controls, and 49 percent of the other-district controls responded.

Approximately 2 months after the Impact training, a survey of students and parents in the Linn-Benton district was also conducted. This survey was administered only in the participating district because permission could not be obtained from the other-district control group. Approximately 48 percent of the parents (*n* = 290) and 99 percent of the students (*n* = 1,028) completed the questionnaires.

### *Instruments*

The multidimensional questionnaire for trainees, titled Community Intervention Evaluation Instrument, was designed to assess types of internal resources and school commitment to AOD use prevention and intervention. Specifically it assessed

1. types and amounts of AOD use,
2. team involvement,
3. teacher initiation of AOD interventions,
4. teacher perceptions of the effectiveness of various AOD training strategies,
5. diagnostic confidence in teachers' ability to identify behaviors indicative of AOD use,
6. teachers' perceptions of the severity of the AOD problems in their schools,
7. teachers' knowledge of the etiology of AOD use, and
8. teachers' knowledge of appropriate reactions to AOD-use scenarios.

The parent survey questionnaire assessed the following areas:

1. sociodemographic items,
2. family interactions,
3. parental perceptions of the effectiveness of AOD prevention and intervention approaches,
4. behavioral norms about AOD experiences,
5. community involvement in AOD groups, and
6. a stress scale.

The teen survey questionnaire assessed the following:

1. peer versus parental influence,
2. sources of social support,
3. a stress scale,
4. self-reported AOD use based on the Michigan Monitoring the Future study scale,
5. alcohol quantity and frequency based on a scale developed by Cahalan and colleagues (Cahalan and Room 1974, Cahalan et al. 1969), and
6. perceptions of family interaction.

A student referral information form was also distributed to principals, teachers, counselors, and AOD specialists to gather anonymous data on all students with suspected AOD problems and the referral procedures implemented.

## Results

The following findings refer only to statistically significant differences among the various groups based on chi-square tests, and to the analysis of variance and significant correlations based on Pearson product-moment correlations and factor analytic techniques. A full research report available from the authors describes in detail the various statistical techniques employed for the different subscales. Space does not permit a full listing of the significant findings.

## *Preexisting Differences Among Teachers*

Teachers who participated in Impact training rated their schools' AOD policies as less effective than did teachers in the control groups. Impact-trained teachers also rated the severity of their schools' AOD problems much higher than did teachers in either control group.

## *Posttest Differences Among Teachers*

Trained teachers were significantly more confident of their ability to diagnose AOD problems than they had been before training. The trained teachers also reported more ability than did teachers in either control group, who did not change from pretesting to posttesting.

Training increased teacher involvement with prevention teams from pretesting to posttesting; this increase was also significantly better than in either control group. Apparently, training had its major intended effect of stimulating involvement of teachers.

The number of AOD education classroom activities increased significantly among the trained teachers in contrast to the control groups. However, one group of control teachers decreased their AOD education activities from pretesting to posttesting.

## *Parent and Student Survey Results*

A significant association was found between gateway AOD users and parental preference for a prosocial response among parents in the targeted school district. Parents with children at risk apparently favored less punitive responses to the problems of their children.

Parents who indicated that their families were very communicative estimated less AOD use by their children and their spouses. This finding was further validated by results from the teen questionnaire: teenagers who indicated they had good communication with their parents reported less personal use of AOD.

It was also true that a significant association was found between the communication factor and family income (the greater the income the more open or constructive the communication in the family).

Based on the teen questionnaire, those students who came from strong communicative families rated their parents as more influential role models than their peers. On the other hand, teenagers from families low in communication rated their peers more influential than their parents.

Parents who scored high on the "controlling" subscales reported their children were less inclined to AOD use. This finding was validated by results from the teen questionnaire: students who reported their parents as more controlling also reported lower levels of AOD use. Similarly, parents scoring high on the controlling subscale reported fewer actual contacts from the school administration for suspected AOD problems among their children. These findings may be an artifact of response bias, for only half the parents returned the questionnaires and that half may reflect a different pattern of family involvement.

The amount of stress that respondents had experienced in the past year also served as a strong predictor of AOD use by students and of alcohol use by their parents.

## Discussion and Recommendations

Project Impact, which has been pilot tested in 40 communities nationwide (OSAP 1988), appears to be a promising alternative to the traditional AOD education and training of past years. Its community intervention model stresses the importance of "concerned others," including school personnel, family, and community members in providing a comprehensive prevention approach.

### *Drug Policy*

A stated goal of this demonstration project was to determine the extent to which an AOD policy exists in the school districts and is understood or perceived as effective by key players in the school. Although a preexisting difference was found between treatment conditions, those teachers who participated in the experimental condition rated their schools' AOD policy as less effective than did teachers in the two control groups. This finding suggests that teachers participating in Impact training had an already enhanced awareness of the serious nature of their schools' problems. It also suggests that these teachers are ready to make some institutional changes with regard to policy in both the school and the community.

### *Diagnostic Confidence*

One of the more important findings from this demonstration project was the ability of teachers in the experimental group to have more confidence in their diagnostic and intervention abilities after the training. A major goal of Impact was to educate teachers about AOD behavior, symptoms of use and abuse, and drug typologies. Teachers felt more capable and confident in their diagnostic abilities after the 4-day, 40-hour intensive training.

The authors wanted to learn what criteria teachers used in deciding to refer students in high-risk environments for AOD assessment. A checklist was introduced in the 12 participating schools. A factor analysis of 27 symptoms used to identify students as at risk for AOD problems isolated five cohesive identifying factors:

1. poor student,
2. aggressive,
3. isolative,
4. having parental problems, and
5. gateway drug user.

A teacher's ability to diagnose confidently appeared to be related to displays of aggressive behaviors by the student and to his or her parental problems at home. This diagnostic confidence also appeared to be associated with the ability to make an appropriate referral for AOD behavior. More long-term outcome research is needed to see if this pattern continues, and what the actual outcomes for students are, based on an improved referral process.

## *Training and Followup*

Teachers who experienced the Impact training program reported more involvement with AOD use prevention-intervention teams compared to those in the control groups. Project Impact emphasizes a team approach to prevention and intervention in the schools. Part of the training involves an understanding of resources in the school and community that are available to teachers who might have high-risk students in their classrooms. In addition, the Impact model is designed to leave in place in the schools a permanent and ongoing intervention and followup team through the resources and expertise of the members of a permanently available core team. The core team includes teachers, administrators, and community intervention specialists who have had previous training in AOD use prevention and, in particular, Impact training. Teachers who went through the 4-day, 40-hour training clearly indicated more need for immediate intervention and were more actively involved with core team members after the training. This finding suggests that along with diagnostic confidence, teachers acknowledged the magnitude of the AOD problem in their schools and were willing to seek additional human resources and backup when deemed necessary. These findings support results from a prior study of Impact training by the authors (Caudill et al. 1988).

## *The Family*

A primary emphasis in the Impact training program is the importance of family communication in preventing AOD use. Communication and empathy are regarded as key components in the prevention-intervention process. This message apparently was effectively conveyed to trained participants, who subsequently expressed their preferences for such prosocial and supportive efforts.

Based on a survey of parents in the participating school district, a relationship was found between a high-risk student using AODs and the parents' preference for prosocial responses to cope with that particular problem. These prosocial responses included, for example, specific referrals to treatment, getting teachers and parents together, and making contact with peer counselors. These responses were in contrast to punitive ones (e.g., drug testing, suspensions, arrests) and were directed at dealing with specific AOD behaviors. These findings suggest that parents who have had experience (or are presently experiencing) AOD use in their children have adopted a more supportive prosocial attitude toward referral and treatment. This same effect was revealed for families in which the spouse abused AODs; the nonusing spouse preferred a prosocial intervention. In addition, findings suggest that the better educated parents preferred prosocial strategies. These findings are encouraging, suggesting that parents who have first-hand experience with AOD problems (either personally or with offspring) are willing to endorse education, community intervention, and peer counseling measures before turning to punitive solutions such as drug testing, legal penalties, and expulsion from school.

## *Parents and Teens*

As noted earlier, both parents and teens were asked to provide information about their style of family interaction. Parents who scored high on the control scale (e.g., severe rules at home, physical punishment, strict adherence to church attendance) reported that their teens drank less than did parents who scored low on this scale. This finding was identical for other drug use. Secondly, those parents scoring high on the control scale also exhibited very high disapproval ratings of AOD use by their teens. Third, it was found that parents who scored high on control were actually less likely to have received calls from administrators regarding their son's or daughter's problem behavior in school. This finding might suggest that part of a prevention strategy is to ensure components of discipline in any family unit. This type of disciplinary intervention might appear difficult or even impossible, considering the age of the target group and the possibility that experimentation with gateway drugs had already occurred. Fortunately, additional data from the communication scale proved to be even more encouraging as a prevention strategy.

Parents who rated their families as more communicative estimated less AOD use by their children. Components of a communicative family included (a) support for one another, (b) understanding one another, (c) activities planned together, and (d) consensus on punitive strategies. The findings suggest that families who rated low in communication or control appeared to have more AOD use among their children. Control and communication seemed to cross-pollinate again, for results indicated that there was more contact from school administrators regarding problem behavior where families rated low in control or communication. Also, families with greater communication seemed to have less alcohol use by adult members, at least for respondents' spouses. Teens from highly communicative families also reported less AOD use.

If a family system or environment can be targeted early as at risk or having an inordinate amount of stress, community intervention by family physician, psychologist, social worker, or school counselor might provide an early intervention for all members of the family to help prevent or alleviate further problems.

This issue of targeting youth in high-risk environments (Bloch and Ungerleider 1988) is important and can be factored into the intervention formula. For example, the data showed that younger, unmarried, blue-collar parents seemed to have more problems with their teens than older, married, white-collar parents. Also, the findings revealed that parents who reported problems with their teens scored higher on the stress index than other parents. Although causal direction has not been established here, there is some evidence that targeting high-stress situations and fostering better communication in these families could prevent AOD problems at a later date.

## Summary

Project Impact provided intensive training to teachers to make them more confident in their ability to recognize AOD problems, increase their involvement with prevention teams, and increase their classroom instruction about AOD use. Project Impact also conducted a survey of students and their parents as part of a needs assessment to provide direction for program development.

Based on pretesting and posttesting with control groups the Impact teachers were significantly more confident in their ability to diagnose AOD use among their students. The Impact-trained teachers participated more frequently in the school prevention team and they implemented more classroom instruction.

The parents and student survey results indicated that students whose parents were more controlling and whose response to problem behaviors was more strict used fewer gateway drugs. Furthermore, students whose families had higher socioeconomic status and more open and positive communication have less AOD use.

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